

Catalog 2015-17

Ohio Northern University is a private, United Methodist Church-related university in Ada, Ohio, including the Colleges of Arts & Sciences, Business Administration, Engineering, Pharmacy, and Law.

Ohio Northern University does not discriminate on the basis of race, religion, national or ethnic origin, gender, sexual orientation, age, or disability.

Title IX Coordinator

Nancy Sabol
Tilton Hall of Law 195
419-772-2218

While every effort is made to ensure the accuracy of the information available at the time copy is prepared for this Catalog, the University reserves the right to make changes at any time without prior notice.

The University's electronic mail address:

info@onu.edu

Visitors Welcome

Visitors to the campus are welcome at any time. An appointment in advance is suggested to avoid waiting or disappointment when an interview is desired. University personnel are usually available at their offices between 8 a.m. and 4:30 p.m., Monday through Friday. See the University Calendar for holiday office closing dates. There is limited staffing in offices during some portions of holiday periods.

The University's telephone number:

(419) 772-2000

The University's administrative FAX number:

(419) 772-1932

The University's address:

Ohio Northern University
525 S. Main St.
Ada, Ohio 45810

The University's Internet home page: <http://www.onu.edu/>

Communications with the University

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President Daniel A. DiBiasio 772-2031
Provost, Vice President for Academic Affairs David C. Crago 772-2034
Vice President for Financial Affairs William Ballard 772-2022
Vice President for Enrollment William Eilola 772-2260
Vice President for Student Affairs Adriane Thompson-Bradshaw 772-2431
Vice President for University Advancement Shannon Spencer, 772-2036
Dean, College of Arts & Sciences Catherine Albrecht 772-2130
Dean, College of Business Administration James W. Fenton Jr. 772-2070
Dean, College of Engineering Eric T. Baumgartner 772-2372
Dean, College of Law Richard Bales 772-2205
Dean, College of Pharmacy Steven J. Martin 772-2277
Dean of Students Adriane Thompson-Bradshaw 772-2431
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Controller Mark Russell 772-2011
Registrar Melanie Hough 772-2024
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Director of Heterick Library Kathleen Baril 772-2188
Director of the Taggart Law Library Nancy A. Armstrong 772-2692
Director of Admissions Deborah Miller 772-2464
Director of Admissions (Law) Chad M. Vondenhuevel 772-2211
Director of Alumni Relations Annmarie Baumgartner 772-2729
Director of Athletics Thomas E. Simmons 772-2450
Director of Polar Careers Justin F. Courtney 772-2401
Director of Community Relations Chris Burns-DiBiasio 772-2780
Director of Counseling Center Michael D. Schafer 772-2190
Director of Engineering Corporate and Alumni Relations Laurie Laird 772-2421
Director of Financial Aid Services Melanie Weaver 772-2271
Director of Honors Program Patrick Croskery 772-2197
Director of Human Resources Tonya Paul 772-2013
Director of Information Technology Jeff Rieman 772-3100
Director of Institutional Research Omer Minhas 772-2529
Director of International Admissions Raymond Orinoco 772-3518
Director of McIntosh Center David L. Dellifield 772-2400
Director of Multicultural Development LaShonda Gurley 772-3145
Director of Residence Life Justin F. Courtney 772-2401
Director of Summer Session Juliet K. Hurtig 772-2032/Melanie Hough 772-2024
Director of Sustainability Terry Keiser 772-1019
Executive Assistant to the President Ann E. Donnelly Hamilton 772-1022
Executive Director of Communications and Marketing Amy Prigge 772-3961

THE OHIO NORTHERN PROMISE

The Ohio Northern Promise is a set of initiatives to make an ONU education more affordable, to reduce student loan debt, to sustain academic quality, and to prepare students for career success. Simply put, it is about ensuring that higher education, historically a key enabler of social mobility, remains accessible and affordable for bright young students and their families.

Key components of The Ohio Northern Promise

1. 20-25 percent reduction in tuition rates (based on 2013-14 rates)
2. A four-year graduation guarantee (available across most undergraduate programs)
3. Hands-on high-impact learning, a core component of every academic major
4. Sustained job placement and graduate and professional school admissions rates for graduates

Learn more: <http://www.onu.edu/promise>



Contents

University at a Glance	2	Dicke College of Business Administration	154
University Calendar, Undergraduate	4	Smull College of Engineering	171
General Information.....	5	Raabe College of Pharmacy.....	185
Admission.....	8	Pettit College of Law.....	193
Expenses.....	10	Scholarships and Loan Funds.....	196
Scholarships and Financial Aid.....	14	The University Faculty.....	212
Campus Student Life.....	15	Board of Trustees	224
Educational Program of the University	21	University Administration	225
Getty College of Arts & Sciences.....	37	Index.....	227

University at a Glance

Accreditation and Affiliations

Ohio Northern University, or its appropriate college or department, holds membership in or is accredited by the following organizations:

UNIVERSITY

Accredited by

The Higher Learning Commission and a member of the North Central Association: www.ncahlc.org; (312) 263-0456

Membership in

American Association for Higher Education
 American Association of Collegiate Registrars and Admissions Officers
 American Association of University Women
 American Council on Education
 Association for Practical and Professional Ethics
 Association of American Colleges and Universities
 Association of College and University Housing Officers International
 The Association of Governing Boards of Universities and Colleges
 Association of Independent Colleges and Universities of Ohio
 The College Board
 Council for Advancement and Support of Education
 Council of Independent Colleges
 Great Lakes Association of College and University Housing Officers
 The Ohio College Association
 National Association of Campus Activities
 National Association of Fellowship Advisors
 The National Association of Schools and Colleges of the United Methodist Church
 National Collegiate Athletic Association
 Ohio Athletic Conference
 Ohio Foundation of Independent Colleges

GETTY COLLEGE OF ARTS & SCIENCES

Accredited by

American Chemical Society
 Association of Technology, Management, and Applied Engineering
 Commission on Accreditation of Allied Health Education Programs
 Commission on Accreditation of Athletic Training Education
 Commission on Collegiate Nursing Education
 Committee on Accreditation for the Exercise Sciences
 Council for the Accreditation of Educator Preparation
 National Accrediting Agency for Clinical Laboratory Science
 National Association of Schools of Music
 Ohio Board of Nursing
 Ohio Department of Education
 Public Relations Society of America

Membership in

Academy of Criminal Justice Sciences
 American Association for Higher Education and Accreditation
 American Association of Colleges of Nursing
 American College Dance Festival Association
 American Correctional Association
 American Geographical Society
 American Historical Association
 American Mathematical Society
 American Physical Society
 American Political Science Association
 Associated Collegiate Press
 Association for Practical and Professional Ethics
 Association for Theatre in Higher Education
 Association for Women in Mathematics

Association of Departments of Foreign Languages
 Association of Technology, Management, and Applied Engineering
 Association of Writers and Writing Programs
 College Art Association
 College English Association
 College English Association of Ohio
 College Media Advisors
 Council of Colleges of Arts and Sciences
 Foundation in Art: Theory and Education
 International Technology and Engineering Educators Association
 Mathematical Association of America
 Modern Language Association of America
 National Association for Sport and Physical Education
 National Association of Schools of Music
 National Communication Association
 National Council of Teachers of English
 National Council of Teachers of Mathematics
 National Dance Education Association
 Ohio Academy of Science
 Ohio Biological Survey
 Ohio Council of Teachers of English Language Arts
 Ohio Newspaper Association
 Ohio Philosophical Association
 Ohio Scientific, Education, and Research Association
 Ohio Dance
 Public Relations Society of America
 South Eastern Theatre Conference
 United States Institute of Theatre Technology

T. J. SMULL COLLEGE OF ENGINEERING

Accredited by

Engineering programs in civil, computer, electrical and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET and the computer science program is accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>.

Membership in

The American Society for Engineering Education
 Association for Computing Machinery

Recognized by

The Ohio Board of Registration for Professional Engineers and Surveyors

RAABE COLLEGE OF PHARMACY

Accredited by

The Accreditation Council for Pharmacy Education

Approved by

The Ohio State Board of Pharmacy

Membership in

The American Association of Colleges of Pharmacy
 Council of Ohio Colleges of Pharmacy

PETTIT COLLEGE OF LAW

Accredited by

The American Bar Association, Section of Legal Education and Admissions to the Bar

Membership in

The Association of American Law Schools
 The National Association of College and University Attorneys

DICKE COLLEGE OF BUSINESS ADMINISTRATION

Accredited by

AACSB International - The Association to Advance Collegiate Schools of Business

HETERICK MEMORIAL LIBRARY

Membership in OCLC, OhioNET, OhioLink

CENTER FOR TEACHER EDUCATION

Accredited by

National Council for Accreditation of Teacher Education (NCATE)

Approved by

The Chancellor of the Ohio Board of Regents

Membership in

American Association of Colleges for Teacher Education
Association of Independent Liberal Arts Colleges of Teacher Education (AILACTE)
Ohio Association of Colleges for Teacher Education
Ohio Association of Private Colleges of Teacher Education

Academic Year 2015-16

Undergraduate Colleges — Two Semesters and Summer Sessions

Aug. 24 - Dec. 18

Jan. 11 - May 6

Summer Sessions

May 31 - Aug. 5

College of Law — Two Semesters and January Term

Fall Semester

Aug. 24 - Dec. 12

January Term

Jan. 4 - Jan. 26

Spring Semester

Jan. 29 - May 14

Summer Semester

May 31 - July 27

Admissions Programs

Rolling Admissions for Colleges of Arts & Sciences,
Business Administration and Engineering
Deadline Admissions for College of Pharmacy
Advanced Placement
Transfer Students
Special, Audit, and Transient Students

Student Population (Fall 2014)

Men	1806
Women	1889
Total	3695

Degrees

Bachelor of Arts
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science
Bachelor of Science in Medical Laboratory Science
Bachelor of Science in Nursing
Bachelor of Science in Business Administration
Bachelor of Science in Civil Engineering
Bachelor of Science in Computer Engineering
Bachelor of Science in Electrical Engineering
Bachelor of Science in Mechanical Engineering
Master of Professional Practice Accounting
Doctor of Pharmacy
Juris Doctor
LL.M. in Democratic Governance and Rule of Law

MAJORS

Getty College of Arts & Sciences

Advertising Design
Applied Mathematics
Art Education
Athletic Training
Biochemistry
Biology
Chemistry
Communication Studies
Construction Management
Creative Writing
Criminal Justice
Education-Early Childhood
Education-Middle Childhood
Environmental and Field Biology
Exercise Physiology
Clinical/Research
Corporate Fitness/Personal Training
Forensic Biology
French
German
Graphic Design
History
International Theatre Production
Language Arts Education

Literature
Manufacturing Technology
Applied Robotics
Manufacturing Management
Actuarial Science
Applied Statistics
Mathematics
Advanced Mathematical Sciences
Teacher Licensure
Medical Laboratory Science
Molecular Biology
Multimedia Journalism
Music
Applied Studies
Music History and Literature
Music Theory and Composition
Music Education
Music Performance
Musical Theatre
Nursing
Philosophy
Philosophy, Politics and Economics
Physics
Applied Physics
Astronomy
Physics
Political Science
American Politics
International Politics
Professional Writing
Psychology
Behavioral Neuroscience
Clinical and Counseling Psychology
General Psychology
Public Relations
Religion
Eastern
Western
Social Studies
Sociology
General Sociology
Social Services Administration
Spanish
Sport Management
Statistics
Studio Arts
2D
3D
Technology Education
Theatre
Youth Ministry

Dicke College of Business Administration

Accounting
Management
Marketing
Pharmaceutical Business
Risk Management and Insurance

T. J. Smull College of Engineering

Civil Engineering
Computer Engineering
Computer Science
Electrical Engineering
Engineering Education
Mechanical Engineering

Raabe College of Pharmacy

Pharmacy

Preprofessional Curricula

Pre-art Therapy	Pre-optometry
Pre-dentistry	Pre-physical Therapy
Pre-law	Pre-physician Assistant
Pre-medicine	Pre-seminary
Pre-occupational Therapy	Pre-veterinary Medicine

SPECIAL PROGRAMS

3+3 Law Program in Select Majors
Computer Science Co-op Program (Professional Practice)
Engineering Co-op Program (Professional Practice)
Honors Program
Mathematics Co-op Program (Professional Practice)
Post Baccalaureate Certificate in Medical Laboratory Science
RN-BSN Completion Program
Study Abroad
Teacher Field Experience Programs
Teacher Licensure (Early Childhood, Middle Childhood, Adolescent - Young Adult, Multi-Age)
Technology Co-op Program

University Calendar, 2015-17

Undergraduate Colleges

Fall Semester 2015-16

August

- 20-23 New student orientation
- 20 Residence halls open, new students, 8 a.m.
- 22 Residence halls open, returning students, 8 a.m.
- 24 Late registration for new, re-entry, and continuing students
- 24 Classes begin 8 a.m.

September

- 1 Last day to add a class or section
- 7 Labor Day
- 15 Beginning of "W" period for withdrawals

October

- 12-13 Fall Break
- Oct 26 - Nov 6
Registration for spring semester

November

- 13 Last day to withdraw
- 13 Last day to remove "I" (Incomplete)
- 23-27 Thanksgiving recess

December

- 14-18 Final exams

Spring Semester 2015-16

January

- 10 Residence halls open, 8 a.m.
- 11 Last day for payment of Spring Semester fees
- 11 Late registration of new, re-entry and continuing students
- 11 Classes begin 8 a.m.
- 18 Martin Luther King Jr. Day (no classes)
- 20 Last day to add a class or section

February

- 2 Beginning of "W" period for withdrawals
- Feb. 29 - March 4 Spring recess

March

- 21 - April 1 Registration for fall semester
- 25-28 Easter recess

April

- 8 Last day to withdraw
- 8 Last day to remove "I" (incomplete) marks
- 23 Honors Day

May

- 2-6 Final Exams
- 8 Commencement

Summer Session 2016

First Session May 31 to July 1

Second Session July 5 to August 5

Summer Orientation (Advising and Scheduling) 2016 dates to be announced.

Fall Semester 2016-17

August

- 18-21 New student orientation
- 18 Residence halls open, new students, 8 a.m.
- 20 Residence halls open, returning students, 8 a.m.
- 22 Late registration for new, re-entry, and continuing students
- 22 Classes begin 8 a.m.
- 30 Last day to add a class or section

September

- 5 Labor Day
- 13 Beginning of "W" period for withdrawals

October

- 10-11 Fall Break
- Oct 24 - Nov 4
Registration for spring semester

November

- 11 Last day to withdraw
- 11 Last day to remove "I" (Incomplete)
- 21-25 Thanksgiving recess

December

- 12-16 Final exams

Spring Semester 2016-17

January

- 16 Residence halls open, 8 a.m.
- 16 Last day for payment of Spring Semester fees
- 16 Martin Luther King Jr. Day (no classes)
- 17 Late registration of new, re-entry and continuing students
- 17 Classes begin 8 a.m.
- 25 Last day to add a class or section

February

- 7 Beginning of "W" period for withdrawals

March

- 6-10 Spring Recess
- 27- April 7 Registration for fall semester

April

- 13 Last day to withdraw
- 13 Last day to remove "I" (incomplete) marks
- 14-17 Easter Recess
- 29 Honors Day

May

- 8-12 Final Exams
- 14 Commencement

Summer Session 2017

First Session May 30 to June 30

Second Session July 3 to August 4

Summer Orientation (Advising and Scheduling) 2017 dates to be announced.

The **Academic Calendar** is available on the Academic Affairs web page.

General Information

Mission, Vision and Core Values

History and Heritage

Ohio Northern University has a 95 percent job and graduate school placement rate with 97 percent of students participating in the placement survey. Its long-standing success is partly because of excellent professors, partly because of ambitious students, and partly because the University always been rooted in the future. At ONU, students move toward a career long before they graduate – and ONU's alumni successes prove it. With top-ranked programs and opportunities outside the classroom, any path a student chooses at ONU will be grounded in concrete applications for the future. ONU's beautiful residential campus is made up of more than sixty modern residences and academic buildings and provides a vibrant campus experience.

It all began with a single person and a single idea. In 1871, Henry Solomon Lehr, with support from the community, founded the Northwestern Ohio Normal School as a teacher-training institution. Two other name changes would follow: first, to Ohio Normal University and second, in 1903, to Ohio Northern University. The evolution from a normal school to a true university reflects an impressive period of growth in both size and scope, one that distinctively combined traditional arts and sciences departments and education with the professional fields of engineering, pharmacy, law, and business. In 1899, the University affiliated with the United Methodist Church and more intentionally embraced the Judeo-Christian values of becoming church-related. From these beginnings, Ohio Northern University has developed a focus on teaching, learning, scholarship, and professional practice, and a campus environment that is student-centered, service-oriented, and values-based.

Mission

Influenced by a unique history and an enduring affiliation with the United Methodist Church, Ohio Northern University's mission is to provide a high-quality learning environment that prepares students for success in their careers; service to their communities, the nation, and the world; and a lifetime of personal growth inspired by the higher values of truth, beauty, and goodness. The University's distinctive academic program includes mutually supporting liberal and professional education components that integrate practice with theory, complemented by excellent co-curricular offerings that enrich the Northern experience. To fulfill this mission, faculty and staff engage with students so they can learn to think critically, creatively, and entrepreneurially; communicate effectively; gain practical experience, solve problems collaboratively; and act as ethical and responsible members of a global community.

Vision 2021

Ohio Northern University's vision is to be among the best private, comprehensive universities in the nation, known for programs of excellence and distinction, and recognized for effectively integrating arts and sciences disciplines, professional studies, high-impact learning, and civic engagement.

To achieve higher levels of excellence and distinction and greater national recognition, the University will build on its current strengths and pursue the following key elements of a shared strategic vision:

- We will identify and implement opportunities for both new and existing academic program growth, with programs in the allied health professions among the first to be considered.
- We will adopt technology resources that enhance student learning and improve administrative functioning.
- We will align our financial aid policies, curriculum, and support services to become a peer leader in graduating students in four years.
- We will build strategic partnerships and expand opportunities to serve our local communities, the region, and beyond.
- We will develop a new campus master plan to meet academic and co-curricular needs, focusing first on a new engineering building and enhanced student services.
- We will incorporate sustainable practices to be better stewards of our environmental, energy, and financial resources.
- We will improve the financial state and fiscal strength of the University.
- We will develop a more compelling brand promise for the University that will advance and enhance our national reputation.

By successfully implementing these key strategies, Ohio Northern University will be poised to celebrate its sesquicentennial year in 2021 and be prepared for continued 21st-century success.

Core Values

Collaboration: We encourage the development of unique collaborations that further distinguish the university.

Community: We are a community that strives to be “purposeful, open, just, disciplined, caring, and celebrative” (Boyer, 1990), and that is strengthened by engaging all members of the community in the life of the University.

Diversity: We value the core belief expressed in the University's motto, “Ex diversitate vires” (out of diversity strength), and provide experiences and programs that prepare graduates for success in a diverse nation and world.

Excellence: We aspire to achieve the highest standards of performance in our professional fields and our roles at the University.

Faith: We celebrate the University's historic relationship and active affiliation with the United Methodist Church and welcome persons of all faiths by providing a supportive environment for their moral and spiritual growth.

Integrity: We expect individuals to conduct themselves with honesty, trustworthiness, and respect for others.

Service: We encourage service to others and civic engagement, both as a commitment to community involvement and as a responsibility of democratic citizenship.

Organization of the University

Ohio Northern University emphasizes a liberal arts education; is organized into five colleges: Arts & Sciences, Business Administration, Engineering, Law, and Pharmacy; and offers the appropriate degrees on the undergraduate and first professional degree levels.

The **Getty College of Arts & Sciences** is organized into 17 departments. Each department has a chair that is directly responsible to the dean of the college. Graduates in all departments of the Getty College of Arts & Sciences satisfy in full the requirements for the Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science, Bachelor of Science in Medical Laboratory Science, or Bachelor of Science in Nursing. The three departments of Art and Design, Theatre Arts, and Music offer programs in the fine arts. Humanities programs are included within the departments of English, Modern Languages, and Philosophy and Religion. Mathematics and natural sciences programs are offered by five departments: Biological and Allied Health Sciences, Chemistry and Biochemistry, Mathematics and Statistics, Nursing, and Physics and Astronomy. Social science programs are offered by three departments: History, Politics and Justice, Communication and Media Studies, and Psychology, Sociology and Criminal Justice. General health-related or sport sciences programs are offered by the Department of Human Performance and Sport Sciences. The Department of Technological Studies offers programs in manufacturing technology, construction management, and technology education. The Center for Teacher Education offers 16 teacher licensure programs approved by the state of Ohio and the National Council for Accreditation of Teacher Education (NCATE); two of these programs (early childhood and middle childhood) are majors in the Department of Education.

Ohio Northern emphasizes a liberal arts education. Graduates in all departments of the Getty College of Arts & Sciences satisfy in full the requirements for the appropriate bachelor's degree. Students qualifying for teacher licensure in early childhood, middle childhood or adolescent/young adult education must satisfy the appropriate College of Arts & Sciences requirements. Students in the colleges of Engineering, Pharmacy and Business Administration must satisfy certain course requirements in the College of Arts & Sciences and may elect further courses offered by the College of Arts & Sciences.

The **T. J. Small College of Engineering** is organized into the departments of Civil Engineering, Electrical & Computer Engineering and Computer Science, and Mechanical Engineering. A five-year optional co-op program is available to all engineering and computer science students who maintain at least a 2.50 cumulative grade point average. All graduates of the College of

Engineering satisfy in full the requirements for the Bachelor of Science in civil, computer, electrical, or mechanical engineering; Bachelor of Science in engineering education; or Bachelor of Science in computer science.

The **Rudolph H. Raabe College of Pharmacy** is organized into the departments of Pharmacy Practice, and Pharmaceutical and Biomedical Sciences. The Raabe College of Pharmacy also has an Office of Experiential Education. The basic program in pharmacy is the Doctor of Pharmacy (Pharm.D.) curriculum, a six-year program.

The **James F. Dicke College of Business Administration** offers the Bachelor of Science in Business Administration with majors in accounting, management, marketing, risk management and insurance, and pharmaceutical business. The college also awards the Master of Professional Practice in Accounting (MPPA).

The **Pettit College of Law** awards the Juris Doctor after successful completion of a three-year course of study. An earned baccalaureate degree from an accredited institution is required for graduation from the College of Law. The College of Law also awards the Master of Legal Letters (LL.M.) in Democratic Governance and Rule of Law.

Brief History of the University

In August 1871, near the end of President Ulysses S. Grant's first administration, Henry Solomon Lehr founded a school that was to become, in time, Ohio Northern University. Its first name was Northwestern Ohio Normal School until its incorporation in 1885, when the name was changed to Ohio Normal University. In the same year, the Department of Law was established. The year before, in 1884, the Department of Pharmacy was founded. The first catalog listed a course in surveying, and, by 1882, the Department of Engineering was formed.

Lehr initially designed his school to prepare teachers for public schools, which was a purpose of normal schools in the 19th century. Another 19th-century cultural experience Lehr followed was the creation of student literary societies, which, according to a University historian, "happily wedded social and intellectual pursuits and neatly filled a gap in the architecture of the institution." In these societies, students found "an outlet for oratorical and literary talents and a fitting haven for the urge to identify with like-minded fellows." In the early history of the University, the "Franklins" and "Philomatheans" created the social activities as well as the political atmosphere of student life.

In August 1899, almost 28 years after its founding, the University was sold to the Central Ohio Conference of the Methodist Episcopal Church, and, in 1901, Dr. Leroy Belt, a Methodist minister, was named its second president. Lehr remained as vice president until his retirement the next year. In 1903, engineering students, led by Thomas Smull, agitated to have "Normal" dropped from the University's name, and the Board of Trustees reacted sympathetically, changing the name to Ohio Northern University, thereby retaining the ONU initials.

Belt was succeeded in 1905 by Dr. Albert Edwin Smith, whose strong and willful leadership guided Northern's destiny for the next quarter century. Smith resembled William Jennings Bryan in physical appearance and even emulated in style and manner the populist senator and presidential candidate. Dr. Robert Williams was Northern's fourth president, from the beginning of the depression in 1930 to the middle of World War II, before he stepped aside for Dr. Robert McClure, who remained in office through the post-war boom years until 1949.

His successor was Dr. F. Bringle McIntosh, who presided as Northern's sixth president for 16 years and oversaw the accreditation of several colleges as well as the development of the west campus, including residence halls and the center that bears his name. Dr. Samuel Lewis Meyer, Northern's seventh president and first layman to hold office since Henry Solomon Lehr, served from 1965 to 1977, during which seven buildings were added to campus.

The eighth president, Dr. Ray B. Loeschner, assumed office on Aug. 1, 1977, and served until July 31, 1979. In December 1979, Dr. DeBow Freed became Northern's ninth president and served from 1979 to 1999, a time that saw improvements to campus buildings, aesthetics and infrastructure as well as the construction of the Freed Center for the Performing Arts. On Sept. 1, 1999, Dr. Kendall L. Baker became the University's 10th president. During his tenure, the University saw growth in student enrollment, additional academic programs, and the addition and renovation of numerous facilities. Baker retired at the end of June 2011. The 11th president, Daniel A. DiBiasio, assumed office on Aug. 1, 2011.

The Campus and Facilities

Ohio Northern University is a safe, friendly, beautiful residential campus, situated on nearly 342 acres in the small town of Ada (pop. 5,000) in northwest Ohio. ONU is located within 90 minutes of several major cities: Dayton, Columbus, Toledo and Ft. Wayne, Ind.

Lehr Memorial Building (1915) contains the offices of Human Resources, the Controller and the Registrar on the first floor. The offices of the President, Vice President for Academic Affairs, Vice President for Financial Affairs, Vice President for Advancement and Institutional Research are on the second floor. On the third floor are the offices of Development and Communications and Marketing.

Hill Memorial Building (1915) contains classrooms and offices for the Department of History, Politics, and Justice and the Department of Psychology and Sociology.

Clark Hall (1950), Department Offices for English Language Program offices (Intensive English Program and International Scholar Transition Program) and the Islamic Center and Mosque.

Dukes Memorial Building (1901-02), Freeman Annex (1995) and Cornet Addition (2003) contain offices and classrooms for the Department of English, the Department of Modern Languages, the Department of Education and the Center for Teacher Education. The office of the dean of the College of Arts & Sciences also is in Dukes Memorial.

James F. Dicke Hall (2003) is the state-of-the-art home of The James F. Dicke College of Business Administration. In addition to high-technology classrooms and break-out rooms, the building houses an entrepreneurship program. The atrium features a 160-foot-long, two-story lobby. The Dicke Forum accommodates formal meetings and events with the latest in communications technology.

The **DeBow and Catherine Freed Center for the Performing Arts** (1991) consists of a performance center and an educational complex. The performance center features the 550-seat Eleanor Biggs Theatre/Concert Hall, the 120-seat Stambaugh Studio Theatre and state-of-the-art production support facilities. The Albert and Harriet Smith Educational Complex is home to the Departments of Communication and Media Studies and Theatre Arts and houses classrooms, faculty offices, a desktop publishing computer laboratory, and television and radio production facilities, including WONB, the University's 3,000-watt FM radio station.

Presser Hall (1929) includes the 156-seat Snyder Recital Hall, a rehearsal room for band, choir, orchestra and other ensembles, teaching studios, an electronic synthesizer lab, classrooms, choral and instrumental music libraries, and faculty offices. A two-story addition (1998) increased the number of practice rooms and added the Foley Rehearsal Hall as well as additional faculty studio offices.

Taft Memorial Building (1929) houses the Department of Technological Studies and the Kuka Robotics Center of Excellence.

The **Tilton Hall of Law** (1973) contains classrooms, seminar rooms, the moot court rooms, faculty offices and administrative offices. Recent renovations include the installation of technology presentation podiums in some classrooms, plasma televisions in the classrooms, and wireless technology throughout the building and library. Learning spaces have been upgraded to incorporate current legal technology in a functional modern environment. The Taggart Law Library is also located in this building. The library contains more than 430,000 volumes, is open 113 hours per week, and provides more than 280 seats, individual study carrels, study rooms, special collections and conference rooms. Every seat is wired for electricity and Internet connectivity. A portion of the law library was renovated as the Hanson Reading Room (2008). In 2011, the law college dedicated its newly renovated Alumni Moot Court, which contains the latest in courtroom technology and provides students an opportunity to hone their advocacy skills in a real-world environment. The courtroom is used for both classes and moot court competitions with seating for 30 students. In 2012, the library renovated and dedicated the David C. Crago

Rare Book and Special Collections Room. This attractive new room has numerous display cases and a museum-quality temperature and humidity-controlled environment to preserve the collection.

The **Office of Law Admissions** (2014), recently renovated in honor of a donation from alumnus Nick Amato, JD '88, contains a new waiting area and coffee bar for visitors, updated offices and storage spaces, and a counseling room for prospective students.

Heterick Memorial Library actively supports the learning, teaching and research activities of the University. The library teaches students to find information for class assignments and research projects, to critically evaluate and determine relevancy of information sources, and to use information sources ethically.

The collection includes books, e-books, print and electronic periodicals, 226 databases as well as DVDs and other media materials to support the curriculum of the University. Local collections are supplemented by Ohio-LINK, a statewide resource-sharing network, and by efficient interlibrary loan services.

Facilities include areas for individual and collaborative study with study carrels, group study rooms, conference rooms and computer labs equipped with printing capabilities. Wi-fi access is provided throughout the building, and numerous power and wired network connections are available.

McIntosh Center (1959) provides a center for student activities, both social and extracurricular, for the University community and for public organizations. The Information Desk provides a central location for students and guests to the campus to obtain general assistance. The student dining room, the faculty staff dining room and the White Bear Inn provide meals and snacks for students and the general public. The building includes a centralized mail room, informal lounge, conference rooms, a general activities room and formal ballroom. The University bookstore and offices of the vice president for student affairs are located on the first floor of McIntosh Center. The second floor houses the Polar Careers office. The offices of the student newspaper, *The Northern Review*, are located on the lower level of the building.

Weber Hall (1956) contains the admissions and international admissions offices and the Office of Financial Aid. A new wing and renovations (2007) provide space for the expanding admissions and financial aid staff plus international admissions.

The Science Complex consists of six buildings. In the center is the **Meyer Hall of Science** (1970), where classrooms, laboratories and offices for the departments of Biological and Allied Health Sciences, Chemistry and Biochemistry and Physics and Astronomy are located. To the west of the Meyer Hall of Science is the **Biggs Engineering Building** (1971), where classrooms, laboratories and offices for the departments of Civil Engineering, Electrical & Computer Engineering and Computer Science, and Mechanical Engineering are located. The office of the dean of the College of Engineering is on the second floor. The computer center also is located in the engineering building. A two-story renovation and addition to the science and engineering buildings (1997) provides facilities for instruction, including a lecture hall, classrooms, laboratories, seminar rooms, service areas and offices. To the east of the Meyer Hall of Science is the **Robertson-Evans Pharmacy Building** (1966), where classrooms, laboratories, and offices for the Department of Pharmacy Practice and the Department of Pharmaceutical and Biomedical Sciences are located. The office of the dean is located on the first floor. Pierstorff Addition (1995) includes a pharmacy museum, computer lab and student lounge. Opened in 2006, the **Hakes-Pierstorff Family Pharmacy Education Center** offers state-of-the-art classroom, laboratory and office spaces for pharmacy students and faculty. Completing the science complex is the **Mathile Center for the Natural Sciences**. Opened in 2009, the Mathile Center connects Meyer Hall and the Robertson-Evans Pharmacy Building. This student-centered research and learning facility blends hands-on teaching excellence with advanced technology in a functional modern environment. The building houses the departments of Nursing and Mathematics and Statistics. **The Astronomy Research Center** opened in 2010 and is located just west of Wander baseball field. It has three permanently mounted telescopes, a roll-off roof, and high-tech charge-coupled device equipment to connect the telescopes with computers and monitors.

The **ONU Sports Center** was created in 1991 with the renovation of parts of the **King-Horn Convocation and Physical Education Center** (1974) and the addition of a field house complex and connecting addition. An addition and renovation also were completed in 1996. The Sports Center accommodates intercollegiate athletics, physical education and recreation activities, as well as commencements, special events, and assembly programs. King-Horn's main floor seats 3,200 for basketball and 5,000 for convocations. A six-lane swimming pool, wrestling room, gymnastics room, dance room, two handball courts, elevated jogging track, multipurpose lounge, and offices and classrooms for the Department of Human Performance and Sport Sciences are among the facilities in King-Horn Center. The field house features a 200-meter indoor running track, cross courts for multipurpose use, two weight-training rooms, a fitness laboratory, and modern sports medicine and training areas.

Ohio Northern University completed construction of an eight-lane, 400-meter outdoor track in 1991. The track is encircled by mound-style seating with additional bleacher seating for 1,000. The infield of the track complex received artificial turf in fall 2013. ONU also constructed a 2.5-mile outdoor jogging/walking path around the perimeter of campus in 1991. The path is 8 feet wide and can be used for biking.

Lehr-Kennedy House (1902), once the retirement home of Ohio Northern's first president, contains the offices of the director of multicultural development, the coordinator of International Student Services and several offices for multicultural student organizations.

Wesley Center Complex (1971) is composed of the **English Chapel** with seating for 350 plus multi-use areas and a small prayer room for campus ministry, outreach and multi-faith worship, and the **Burgett Wing** (2002) which houses the Department of Philosophy and Religion.

Wilson Art Center and Elzay Gallery (1976) contains classrooms, studios and offices for the Department of Art and Design. The art gallery is connected to the classroom-studio building by a loggia and is used to display student and faculty exhibitions as well as the work of artists in invited shows. An addition (1995) includes a sculpture studio, ceramics studio, a lounge and a graphic design studio.

The Alumni House, at 115 W. Lima Ave., is the former president's house. This updated facility not only provides offices for the Office of Alumni Relations, but also is a place to greet alumni returning to campus.

The **Dicke House** (2000) is home for the University's president.

The **Deming-Combe** boulevard entrance to campus, located at Main Street and College Avenue, was completed in 1996.

The **Dial-Roberson Stadium** (2004) is an outdoor events stadium with training rooms and offices as well as modern facilities for ONU's football fans to enjoy the Polar Bears. Dial-Roberson Stadium and Kerscher Stadium both received artificial turf in fall 2013.

The Inn at Ohio Northern University (2008) is a full-service, 73-bed hotel offering deluxe guestrooms plus one- and two-room suites, a dining room and pub. In addition, the hotel has more than 3,000 square feet of flexible meeting space, including a 14-seat executive boardroom.

Baker Commons, named in honor of Dr. Kendall L. Baker, president emeritus, and Mrs. Toby Baker, is located primarily in the southwest quadrant of the campus and includes the Dicke House, Stadium View Apartments, Klondike's Den, Polar Place, Dial-Roberson Stadium, the Remington Walk, Northern Commons and the Affinity Village.

Admission to the University

Ohio Northern University selects its student body from among those students possessing characteristics congruent with the institution's objectives, stated earlier. Generally, a student must be prepared to use the resources of the institution to achieve personal and educational goals.

A high school student applying for admission should have demonstrated academic aptitude in his/her high school program. Prior to matriculation, students must demonstrate completion of an accredited high school program or its equivalent. While specific admission requirements vary among the four undergraduate colleges within the University, all colleges require a minimum of four units of English, two mathematics units (algebra and geometry), and other units from among the natural sciences, social sciences, history, or language for a total of 16 units. Enrollment in a modern language is encouraged. Applications for admission should be accompanied by scores from the American College Testing Program (ACT) or Scholastic Assessment Test (SAT), official high school transcript sent from the high school, minimum 250-word personal statement (required by College of Pharmacy only) and one high school teacher/counselor recommendation form or letter (required for College of Pharmacy first-time freshmen only).

Application for admission to Ohio Northern University may be made at the end of the junior year or early in the senior year of high school. First-time freshmen applying to the College of Pharmacy must submit all application materials by Dec. 1. Early applications are encouraged particularly as some programs have capacities that can be reached early. For maximum scholarship consideration, applications should be submitted by Dec. 1. The ACT or SAT should be taken no later than the December testing date of the senior year. Applicants will be reviewed once the file is complete.

***Advanced Placement (AP)** The University grants credit for College Entrance Examination Board Advanced Placement Tests to those high school students achieving at least the minimum score established by the department in which credit is being sought. Test results should be sent to the University registrar. Final decision rests with the chairperson of the department.

***College-Level Examination Program (CLEP)** The University grants credit under the College-Level Examination Program of the College Entrance Examination Board for students to earn college credit by subject-level examination prior to enrollment at ONU.

***International Baccalaureate (IB)** Ohio Northern University recognizes the International Baccalaureate (IB) Program and will grant transfer credit, up to a total of 30 semester hours.

Students will earn 15 credit hours for completion of the IB diploma. In addition, students will receive credit for individual scores ranging from 5 to 7 on the higher level examinations, for a total no greater than 30 credits of AP, IB, CLEP, PEP or institutional examination.

*Further information is available on the web at www.onu.edu/registrar.

Transfer Applicants Transfer students in good standing academically and socially from accredited colleges and universities may be admitted with advance standing. Credits to be transferred must be graded C (2.00) or higher and must apply toward the student's intended course of study. Concealment of previous attendance at a college or university is cause for cancellation of admission and registration. Ohio Northern welcomes transfer students from junior colleges, community colleges, and other accredited institutions to pursue majors in the undergraduate colleges. Transcripts from each post-secondary institution previously attended, sent directly from the issuing institution to Ohio Northern, are required as well as a final high school transcript.

Students who have completed the Associate of Arts or equivalent degree from an accredited institution, who have an accumulative grade point average of at least 2.00, normally will be able to complete work toward graduation from the Getty College of Arts & Sciences with the Bachelor of Arts in

two academic years, if courses in the first two years of work conform to the usual pattern in their chosen major field. The student will assume a normal course load of 15 to 19 academic semester hours. If a student wishes to obtain teacher licensure, it is possible that one or more additional academic semesters of study will be required.

Transfer credit can be accepted from institutions lacking regional accreditation but having accreditation by an agency recognized by the Council for Higher Education Accreditation (CHEA). It is the applicant/student's responsibility to provide the required documentation necessary for determination of the acceptability of the work for transfer credit at ONU. Credit may be accepted only upon the recommendation of the specific ONU department and/or college in which the coursework is appropriate. Before credit is awarded, previous coursework may be subject to validation by examination if recommended by the appropriate ONU college or department.

Students wishing to transfer work in from colleges and universities outside of the United States must submit an official transcript, translated into English, if necessary. If the credentials are not in English and must be translated, the student will pay for the cost of the evaluation. Ohio Northern University accepts evaluations by any of the following foreign credential services:

Members of NACES (National Association of Credential Evaluation Services) found at <http://www.naces.org/members.html> (not including FORMER members), or AACRAO IES (International Education Services) whose website is ies.aacrao.org.

Re-Entry Students Re-admission will be subject to approval of the dean of the college of application for re-entry, the vice president for student affairs, and the Office of the Controller. A student who has not been enrolled at ONU for one year or longer will, upon re-entry, be under the graduation requirements as specified in the catalog issued in the academic year of re-entry.

Credit Articulation for Transfer or Returning Students

A student who returns/transfers to ONU may automatically apply to his or her degree requirements a course that the student has completed at ONU if the course or a close equivalent exists in the current university catalog and no more than six years have elapsed since the student completed the course (and the grade of the course meets the degree requirements).

A student who transfers to ONU may automatically apply to his or her degree requirements a course that the student has completed at another college or university if the course exists in the current ONU articulation catalog and no more than six years have elapsed since the student completed the course with a grade of C or higher.

Any course completed more than six years before its application to a degree program at ONU is subject to review and approval by the dean of the college that offers the course or its equivalent at ONU.

To complete a major, minor, or option for a degree from Ohio Northern University, a student must complete 25 percent of the course requirement for the major, minor, or option at Ohio Northern University. Therefore, only 75 percent of the hours required for a degree can be transferred in and applied to a student's hours toward graduation.

Home Schooled Admissions

Home schooled students seeking admission to Ohio Northern need to complete the current "Application for Undergraduate Admission". Applications for admission should be accompanied by: the results of a national standardized college admittance test, such as ACT or SAT, which are deemed satisfactory in determining the competency of the home school high school curriculum; a transcript/portfolio of high school work (9-12th grades) with courses completed (or in progress) and levels of achievement (i.e. grades including a cumulative GPA or another acceptable/standard measurement of academic success); transcripts of any college-level or post-secondary courses taken (granting of any credit is based on transfer credit requirements outlined in the university catalog); minimum 250-word personal statement and/or submit their own essay regarding their desire to attend ONU (required by College of Pharmacy); a listing of out of class activities including any extracurricular experiences, community and church involvement, travel, employment, and other interests/hobbies; and one recommendation (required for College of Pharmacy first-time freshmen only).

The transcript must be signed by the instructor(s), dated, and meet the normal requirements as a college preparatory curriculum (as outlined in the University Catalog). In place of an accredited high school diploma or GED results, the home-schooled students will submit evidence of the annual approval of their program as required within their home state.

Personal references and a personal interview are optional but strongly encouraged. An on-campus visit is recommended. Once the applicant's file is complete, the Admissions Committee will review the student's promise for academic success in the program selected at the university. However, some programs can reach capacity early; check regarding timelines.

Merit (academic) scholarships are available to home schooled students based on outstanding grades/performance and the appropriate ACT or SAT scores. Refer to the ONU Scholarship materials for details. Special talent awards are also described in this material. Financial assistance, in general, applies to home schooled students in the same fashion as others once admission requirements are met satisfactorily and admission is granted. Admitted students are encouraged to work with the Financial Aid Office as to the completion of forms and requirements for various programs.

Admission to the Pettit College of Law Prospective law students should request separate law college admissions materials. Applicants for the ONU College of Law must take the Law School Admissions Test (LSAT) and graduate from an accredited four-year college or university.

Ohio Northern undergraduates may be admitted to the College of Law under either the regular or automatic admissions programs.

Applicants from the undergraduate colleges will be admitted to the Pettit College of Law if they:

1. Maintain an undergraduate grade point average of at least 3.40;
2. Score in at least the 75th percentile of the LSAT or higher;
3. Pass character and fitness review by the Admissions Committee of the College of Law; and
4. Pursuant to ABA Admissions Standard 501, are deemed by the law school admissions committee to appear capable of satisfactorily completing its program and being admitted to the bar.

Students with questions about either the regular or automatic admission program are encouraged to consult the pre-law adviser in their respective departments or the College of Law admissions office.

Special, Audit, Transient, and Postgraduate Students Admission is available under certain conditions for special non-degree seeking students and for auditors. Transient students are admitted upon the approval of the home institution and certification of good standing. Individuals with previously earned bachelor or higher degrees who wish to pursue further undergraduate study are admitted as postgraduate students upon receipt of a transcript or certificate of graduation from the granting institution.

Application materials and other information will be forwarded promptly upon request. Write to: The Office of Admissions, Ohio Northern University, 525 S. Main St. Ada, OH 45810.

Disabilities Policy

No qualified person shall, on the basis of disability, be denied admission to Ohio Northern University or be subjected to discrimination in recruitment or admission by Ohio Northern University; or be excluded from participation in or denied the benefits of any program or activity of Ohio Northern University. A qualified disabled person is a disabled person who meets the academic and technical (i.e., non-academic admissions criteria essential to participation in a program or activity) standards requisite to admission to Ohio Northern University or participation in its programs and activities.

Ohio Northern University does not make pre-admission inquiries as to whether an applicant for admission is disabled. However, Ohio Northern University may, in connection with its voluntary efforts to overcome the effects of limited participation in the University's programs by disabled persons, invite applicants, on a voluntary basis, to indicate whether and to what extent they are disabled.

After admission, Ohio Northern University may make inquiries on a confidential basis as to disabilities that may require accommodation. Disabled students admitted to Ohio Northern University who require accommodation of a disability should request such accommodation in writing from the dean of the college to which the student was admitted. Requests for reasonable accommodation will be honored unless they impose an undue hardship on

Ohio Northern University.

No individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities privileges, advantages, or accommodations of any place of public accommodation owned or leased by Ohio Northern University.

Student Right-To-Know Act

In accordance with guidelines for the Student Right-to-Know Act, Ohio Northern University had a six-year average graduation rate of 66% for first-year students entering between 2003 and 2006 (does not include Pharmacy, Law, and 5th year Engineering students).

International Students

Ohio Northern University welcomes applications from qualified international students. Applications for undergraduate programs are accepted on a rolling basis. Students requiring a visa to enter the USA should apply at least two months in advance of the term they intend to enroll. For those interested in the Doctorate of Pharmacy program, freshmen must apply by December 1 while transfer students should apply by April 1. In order to be considered for admission to Ohio Northern University, students should submit the International Student Application (on-line), official transcripts of all high school and university course work, and proof of English proficiency (see below). Those students requiring a visa to enter the USA must also show proof of financial support for the first year of college expenses, as well as proof of resources for future years of study.

English Language Requirements:

Full Academic Admission:	Minimum Score
TOEFL - paper based	550
TOEFL - internet-based	79
IELTS - International English Language Testing System	6.0 (no sub-score below 5.5)
MELAB	77 %
ELS Center Completion	Level 112
SAT Critical Reading	550

International Scholar Transition Program Admission: Score Range

TOEFL - paper based	460-549
TOEFL - internet-based	50-78
IELTS - International English Language Testing System	5.5 (no sub-score below 5.0)
MELAB	65% - 76%
ELS Center Completion	Level 109-111

SAT Critical Reading 400-549

If the student has taken AP English or IB English courses, the English Language Proficiency requirement may be waived. Students who are academically qualified for admission but do not meet the minimum language requirements may apply to study in Ohio Northern University's Intensive English Language Program.

International students for whom English is not their native language must complete the College Composition course sequence (ENGL 1411 and 1421 or ENGL 1511 and 1521) based on results of the ONU Writing Placement Exam administered during International Student Orientation. Requirements may vary by college.

Scholarships for International Students

- **Dean's Global Scholarship** Starting at \$8,000
Renewable for each year of study
Eligibility: overall equivalent grade of 82 percent or 3.2 GPA
- **Dean's Distinction Scholarship** Starting at \$4,000
Renewable for each year of study
Eligibility: overall equivalent grade of 75 percent or 2.5 GPA
- **Visionary Scholarship** of \$2,000 per year awarded to international students who have spent at least one year studying at a U.S. high school.

For further information, contact the Office of International Admissions at int-adm@onu.edu

Expenses

Students enrolled for the 2015-16 academic year

	Arts & Sciences and Business Administration	Engineering	Pharmacy
Tuition & General Fee Per Semester:			
•Full-time student	\$14,125	\$16,175	\$16,700
•Part-time student (less than 12 hrs.) per hour	\$1,180	\$1,350	\$1,390
•Academic overload fee (per hour)	\$885	\$1,010	\$1,045
Technology Fee Per Semester			
•Full-time Student	\$280	\$280	\$280
•Part-time Student (less than 12 hrs.)	\$115	\$115	\$115
Room			
•Residence hall per semester, double or triple occupancy	\$2,525	\$2,525	\$2,525
•Residence hall per semester, (air-conditioned)	\$2,745	\$2,745	\$2,745
•Air-conditioned Suite	\$3,155	\$3,155	\$3,155
•Two bedroom-two resident campus apartment	\$4,200	\$4,200	\$4,200
•Two bedroom-three resident campus apartment	\$3,595	\$3,595	\$3,595
•Four bedroom-four resident campus apartment	\$4,000	\$4,000	\$4,000
Board			
Block 200 meal plan per semester with \$275 dining dollars	\$2,765	\$2,765	\$2,765
19 meal plan per semester with \$250 dining dollars	\$2,700	\$2,700	\$2,700
12 meal plan per semester with \$250 dining dollars	\$2,600	\$2,600	\$2,600
Greek Affinity Village plan, per semester, 8 meals per week \$250 dining dollars	\$1,920	\$1,920	\$1,920
Total Per Semester, Full-time student	\$19,630	\$21,680	\$22,205
Based on full tuition, technology fee, double occupancy room & 19 meal plan			
Total Per Academic Year, Full-time student	\$39,260	\$43,360	\$44,410
Based on full tuition, technology fee, double occupancy room & 19 meal plan			

Bachelor of Science in Medical Laboratory Science (BSMLS) West Central Ohio Medical Laboratory Science Program (includes professional liability insurance, administrative costs)

Tuition: \$3,010 per semester, lasts 3 semesters
Technology Fee Per Semester: \$280 (full-time), \$115 (part-time)

RN/BSN Nursing Completion Program

Tuition: \$340 per semester hour
Technology Fee Per Term: \$140
Applicants seeking admission to the RN-BSN Completion Program must meet the following criteria:

1. Associate degree or equivalent degree from a regionally accredited institution.
2. Minimum GPA 2.50
3. Current and unrestricted Ohio RN license
4. Completion of a writing sample
5. Meet the health requirements of the clinical agencies
Each applicant must submit an RN-BSN application, ONU Financial Aid Form, Informational Form, Computer Account Agreement and \$30.00 application fee (waived if student visits campus before applying or if application is completed online). All academic transcripts must be submitted to ONU directly from the institution.

Intensive English Program

Full-time Tuition: \$3,440 per eight-week term
Part-time (less than 8 hours per term) Tuition: \$280 per credit hour
Technology Fee Per Semester: \$280 (full-time), \$115 (part-time)
Student Testing, Tutoring and Activity fees: \$25 per term.

International Scholar Transition Program

Student Testing, Tutoring and Activity fees: \$100 per semester

MPPA Program

Tuition: \$14,120 (full time per semester) \$1,025/credit hour (less than 12 hours)

Payment

Semester Due Dates for Fee Payment Fall – August 24, 2015 • Spring – January 11, 2016

The university makes available to parents and students a variety of plans which can be used to make fee payments. Please contact the controller's office for additional information on these plans.

Regular Billing Schedule For students selecting courses during the advance registration period, bills will be sent through the TouchNet Ebill System. Students will receive an e-mail at their ONU address when a bill is available for viewing. Full payment of all charges due is required to complete registration. Failure to do so will result in the cancellation of the registration. Any arrangements for loans or financial aid should be made well in advance of each semester so that all fees are paid by the date they are due.

For students registering at the beginning of the semester, full payment is required as a part of the registration process.

Visa/MasterCard/Discover/American Express Payment of fees may be made by Visa, American Express, MasterCard, or Discover. A convenience fee of 2.75% will apply.

Conditions

Tuition and fees cover use of the library, laboratories, Health Center, Sports Center, and McIntosh Center; cultural activities; co-curricular programs; admission to athletic events and most other events on campus; the student newspaper, literary magazine, and yearbook if full-time during the two semesters of the academic year. All university students, except married students and students living with parents or other close relatives, will be required to live in University housing which includes all residence halls, fraternity and sorority houses. When housing demands exceed capacity, the obligation for living in residence halls will be waived by using a priority system. (See Campus Student Life Section of this catalog.)

All residents in the residence halls are obligated to a meal contract for food service in the student dining hall located in McIntosh Center. Any application to waive this service must be made each semester to the director of residence life.

All expenses associated with off-campus study, such as travel including field trips, clothes, and meals at unusual times, will be borne by the students. Box lunches may be obtained for meals which cannot be taken on campus for boarding contract students.

Other Charges

Auditing Fee: per semester hour (when permitted) \$15.00

Administrative/Activity Fee: per semester hour \$48.00.
Applicable to outbound tuition exchange students, outbound international exchange students, and others who receive remission of tuition. Also applies to those students participating in study abroad experiences and enrolled in OVRC subject coursework.

Tuition Remission Fee:

Full-time (12 credit hours or greater)	\$725.00
6-11 Credit hours	\$300.00
1-5 Credit hours	\$150.00

Placement Examination No charge for administration of placement examinations required by a department or college for determining entry level in sequential courses. If credit is established by the examination, a credit fee, as indicated below, will be required.

International Student fee: per year \$275.00

Course Credit by Institutional Examination:

Administration fee, per course \$25.00
Payable before the examination is administered. Applied to credit fee if credit is earned.

Credit fee Fees must be paid before credit is entered on student's permanent record in Registrar's Office. 50% of credit hour charges assessed part-time student.

All full-time, degree-seeking students will be permitted to take one course (up to 5 hrs.) by examination at no charge.

Academic Overload Fees: Maximum hours which can be taken per semester without overload charge:
Undergraduate and Pharmacy 19 hours
For each semester hour over maximum, 75% of semester hour charges assessed part-time students will be billed. *Exemption:* Activities courses not including physical education service courses, taken as electives.

Applied Music Lessons Fees for all Music Majors:

Flat semester fee: \$125.00 for all lesson on all instruments
(additional fees for voice lessons are below)

Applied Music Lessons Fees for Non-Music Majors:

Flat semester fee: \$325.00 for each instrument
(additional fees for voice lessons are below)

For all Voice Students:

Additional fees of \$100.00 *per semester* will be applied to these courses for Musical Theater Majors to cover accompanist fees:

MUSL 0011A
MUSL 1111A
MUSL 1121A
MUSL 2111A
MUSL 2121A
MUSL 3111A
MUSL 3121A

Additional fees of \$100.00 *per semester* will be applied to these courses for Vocal Music Majors to cover accompanist fees:

MUSL 1211A
MUSL 1221A
MUSL 2211A
MUSL 2221A

MUSL 3211A
MUSL 3221A
MUSL 4211A
MUSL 4221A

Recital Charges:

MUSL 3301 Half Recital: \$200.00
MUSL 3311 Junior Recital: \$350.00
MUSL 4311 Senior Recital: \$350.00

Late Registration Fee: The late registration fee is assessed if course registration is not completed at the established time each semester. \$110.00

Late Payment Fee: If fees are not paid in full when due, a \$50.00 charge is assessed. If fees are then not paid by the first day of class, a charge of 1 1/2% of the unpaid will be assessed. Thereafter, interest at 1 1/2% per month (18% annual) will be charged on any unpaid balance at the end of each month.

Monthly Payment Plan Fee: \$30.00

Application Fee: non-refundable, payable with application for admission \$30.00 (waived if student visits campus before applying or if application is completed online).

Advance Deposit: Upon receiving an offer of admission to Ohio Northern, an advance deposit is required by May 1 from all students. The amount of deposit is \$200.

If a student applying for admission for fall semester is unable to attend and if the University has received written notice by May 1, 100% will be refunded; after May 1, no refund.

For all other semesters, 50% of the advance deposit is refunded if written notice is received 30 days prior to the start of the semester.

All international students will be required to make a deposit with the University for funds in an amount not less than one semester's tuition, fees, room and board for the college in which the student will be enrolled.

Medical Laboratory Science Students:

Fourth year Only

Microscope rental rates: approximately \$245.00 per school year (price includes delivery and pick-up charges)
\$200.00 refundable security deposit
\$50.00 theft insurance
(Total = \$495.00 per year)

All lease agreements made through and fees paid to Dayton Microscope and Supply, Inc. before the first day of class in June. Additional information on the leasing is available through the WCOMLS Program Office in the Department of Biological and Allied Health Sciences.

Transcript Fee:

- Transcripts may be ordered via Self-Service Banner from National Student Clearinghouse (NSC), a non-profit organization serving the higher education community.
- Transcript fee is \$4 plus NSC service fee(s).
- Transcripts ordered from NSC are processed same or next day if electronic delivery is chosen, and two to five days business days if paper delivery is chosen.
- Special handling will be granted upon request, at the registrar's office, with prepayment of the appropriate fee.

Placement Service: Up to 10 mailings of credentials without charge. Each mailing above 10: \$3.00

Returned Check Fee	\$25.00
Residence Halls	
Improper check-out	\$100.00
Re-pin/new keys	\$100.00
Door knob replacement	\$300.00

Motor Vehicles

On-Campus Parking Permit

- Full Year \$65.00
- Per Semester \$40.00

Schedule of Fines

Improper parking	\$15.00
Driving or parking on grass	\$30.00
Driving on sidewalks	\$30.00
Reckless operation of a motor vehicle	\$35.00
Parking without parking permit — first offense	\$65.00
Stop sign	\$15.00
Parking in fire lanes	\$35.00
Falsification of information	\$30.00
Parking longer than posted time	\$15.00
Parking in restricted area	\$30.00
Parking in handicapped space (not appealable)	\$50.00
30-day Parking Ticket Non-Payment Late Fee (per ticket)	\$5.00

Motor vehicle regulations are designed to protect the safety and welfare of the campus community and promote good order. Violations are issued by Security Officers. Cited violators may appeal to an Appeals Committee within three working days of the violation.

Other Deposits

Marching Band Uniform Maintenance Fee	\$60.00
Instrument Deposit (refundable to student account)	\$50.00

Summer Session 2016

College Fees, per credit hour

- Colleges of Arts & Sciences and Business Administration \$800
- College of Engineering \$915
- College of Pharmacy \$945

Summer Apartment Rental

Double \$415 per month

Students are entitled to a pro-rata refund calculation through the 60% point of each term. A 100% refund is granted on or before the first day of each session. After that, the percentage is based on the number of days in attendance for the session.

Charges for Damages to University Property

Students will be billed for any damages to university equipment or property. The charges include the estimated cost of replacement parts or materials, labor for repair or replacements, and overhead expenses associated with the clean-up, repair, or replacement.

Payment of University Accounts

Students should pay all financial obligations to the university promptly. Registration for a succeeding semester and issuance of a diploma or transcript is dependent upon the student paying all financial obligations to the university.

Student Identification Cards

The first student ID card is issued to registered students without charge. A replacement fee of \$25.00 will be charged for lost, stolen, or damaged ID cards. The ID card allows free admission to athletic events, reduced admission to theatre productions, and the artist series. This card is also required for library checkout, meal contract registration, and resale of textbooks at the university bookstore. ID cards are also required for some labs and entrance to residence halls and King Horn.

Refunds

If a student withdraws from the university, or is suspended for disciplinary reasons, refunds of tuition will be made on the basis shown below. Withdrawal date is the date the student officially submits the withdrawal form, or the date the University determines the student ceased attendance or failed to meet published academic policies, whichever comes first. Students attending Ohio Northern University are entitled to a pro-rata refund calculation through the 60% point of the semester. Tuition, room and board charges will be included in the designated refund percentage. Financial aid adjustments will be calculated based upon mandated Federal refund calculations. 100% refund is granted on or before the first day of class each semester. After that, the percentage is

based on the number of days in attendance for the semester. There is no refund after the first 60% of the semester has been completed.

Also, keep in mind, students who drop from full- time to less than full-time during the first 60% of the semester will have adjustments made to their financial aid and tuition.

Financial Aid

Students who withdraw during a term will be subject to adjustments in their financial assistance. The adjustment of financial aid depends on the policies of the organization from which the aid came. If the particular agency or foundation has no policy for adjustment due to withdrawal, the adjustment will be made on the basis of Ohio Northern University's refund policy.

The adjustments in charges for a student withdrawal may result in an outstanding balance on the student's account which will be due and payable at the time of withdrawal.

Adjustments in loans from prior semesters are generally not made; however, students may wish to pay off any loans when they withdraw.

Federal Perkins Loan and Health Professions Student Loan borrowers will be expected to provide the exit interview information as requested through University Accounting Service, our billing agency, at www.uasexit.com.

Earnings from campus employment for the time worked up to the date of withdrawal will be paid to the student on the next scheduled date of pay.

All adjustments in financial assistance will be made by the director of financial aid.

Review and Appeal

Review and appeal boards, composed of students, faculty, and administrators, are available for review of certain charges. For example, motor vehicle violation charges can be appealed in writing through the university security office to the Traffic Violation Appeals Committee. Appeals for other charges must be filed with the dean of student services.

THE UNIVERSITY RESERVES THE RIGHT TO MAKE NECESSARY ADJUSTMENTS IN ANY CHARGE TO STUDENTS AFTER DUE NOTICE.

Course Fees 2015-16

ATTR 1101 Professional Emergency Care	\$5.00
BIOL 1031 Life & Earth Science for Early & Middle Biology Lab Fee	\$70.00
BIOL 1101 Principles & Concepts of Human Biology	\$30.00
BIOL 1201 Molecules & Cells	\$30.00
BIOL 1311 Molecules & Cells	\$30.00
BIOL 1321 BIOL 2 Organismal Biology	\$45.00
BIOL 1351 Human Anatomy & Histology	\$60.00
BIOL 2001 BIOL 3 Diversity of Life	\$35.00
BIOL 2041 Systematic Plant Survey Biology Lab Fee	\$35.00
BIOL 2041 Systematic Plant Survey Nature Center Fee	\$90.00
BIOL 2101 Genetics	\$125.00
BIOL 2131 Natural History (1+6) Biology Lab Fee	\$60.00
BIOL 2131 Natural History (1+6) Nature Center Fee	\$30.00
BIOL 2191 Forensic Biology 1	\$100.00
BIOL 2231 Invertebrate Zoology (3+3)	\$50.00
BIOL 2291 Forensic Biology 2	\$120.00
BIOL 2311 Anatomy & Physiology 1 (3+3)	\$40.00
BIOL 2321 Anatomy & Physiology 1 (3+3)	\$40.00
BIOL 2511 Ecology	\$30.00
BIOL 2591 Crime Scene Investigation	\$100.00
BIOL 2631 Biogeography Biology Lab Fee	\$45.00
BIOL 2631 Biogeography Nature Center Fee	\$90.00
BIOL 2691 Computer Forensics	\$50.00
BIOL 2751 Medicinal Herbs	\$20.00
BIOL 2901 Special Topics in Advanced Forensic DNA	\$200.00
BIOL 2901 Special Topics in Biological Sciences	\$25.00
BIOL 3011 Developmental Biology	\$60.00

BIOL 3021 Human Anatomy	\$125.00	EDUC 4701 Student Teaching- EC/MC	\$300.00
BIOL 3031 Histology	\$30.00	EDUC 4721 Student Teaching- Adolescent	\$300.00
BIOL 3111 Microbiology	\$75.00	EDUC 4741 Student Teaching- MultiAge	\$300.00
BIOL 3191 Forensic Microscopy	\$100.00	ENGR 2611 Explorations Sustainability	\$300.00
BIOL 3221 Bioscience Lab	\$90.00	GEOG 1901 Special Topics in Geography	\$10.00
BIOL 3241 Med Physiology 1	\$40.00	GEOG 2481 Intro to GIS	\$10.00
BIOL 3251 Med Physiology 2	\$40.00	GEOG 2551 Spatial Methods 1	\$10.00
BIOL 3291 Physical Methods in Forensics	\$100.00	GEOG 2561 Spatial Methods 2	\$10.00
BIOL 3431 Histological Techniques	\$40.00	GEOG 2621 GIS for Criminal Justice	\$10.00
BIOL 3521 Molecular & Cell Biology Lab	\$120.00	GEOG 2641 GIS for Marketing	\$10.00
BIOL 3541 Bioinformatics	\$25.00	GEOG 2681 Cartography	\$10.00
BIOL 3571 Forensic Serology/DNA Analysis	\$200.00	GEOG 2901 Special Topics in Geography	\$10.00
BIOL 3601 North American Mammals	\$35.00	GEOG 3021 Nature Center Seminar in Geography	\$60.00
BIOL 3611 Entomology	\$40.00	GEOG 3481 Applied Geographic Information Systems	\$10.00
Biology Lab Fee		GEOG 3901 Special Topics in Geography	\$10.00
BIOL 3611 Entomology	\$70.00	GEOG 4001 Intro to Remote Sensing	\$10.00
Nature Center Fee		GEOG 4901 Special Topics in Geography	\$10.00
BIOL 3621 Parasitology	\$40.00	GEOL 2801 Geology	\$70.00
BIOL 3631 Ornithology	\$95.00	GGCJ 3921 Special Topics in Geography & Criminal Justice	\$10.00
BIOL 3641 Herpetology	\$25.00	GMK 3541 Geography for Marketing	\$10.00
Biology Lab Fee		GMK 3941 Special Topics in Geography	\$10.00
BIOL 3641 Herpetology	\$90.00	HIST 0041 Teacher Licensure Orientation	\$90.00
Nature Center Fee		HIST 3021 Nature Center Seminar in History	\$90.00
BIOL 3651 Forensic Entomology	\$70.00	HIST 4121 Field School in Archaeology	\$260.00
BIOL 3671 Field Botany	\$50.00	HSPS 3021 Nature Center Seminar in History and Political Science	\$90.00
Biology Lab Fee		ISTP Program Fee per Term	\$100.00
BIOL 3671 Field Botany	\$320.00	LAW 1329 Forensic Evidence	\$300.00
Nature Center Fee		MRKT 3541 GIS for Marketing	\$10.00
BIOL 3681 Ichthyology	\$50.00	ME 1411 Engineering Material Science	\$30.00
Biology Lab Fee		ME 3411 Manufacturing Laboratory	\$45.00
BIOL 3681 Ichthyology	\$420.00	ME 4011 Process of Design	\$25.00
Nature Center Fee		MGMT 4775 Executive Classroom	\$750.00
BIOL 3691 Field Invert Zoology	\$40.00	MLS 4601 Foundations-CLS	\$50.00
Biology Lab Fee		MLS 4651 Blood Banking & Transfusion Science	\$100.00
BIOL 3691 Field Invert Zoology	\$360.00	MLS 4661 Clinical Chemistry	\$50.00
Nature Center Fee		MLS 4681 Clinical Laboratory Practicum Orientation	\$50.00
BIOL 3701 Marine Biology	\$1,100.00	MLS 4691 Clinical Hematology Practicum	\$50.00
BIOL 3711 ADV Marine Biology	\$50.00	MLS 4701 Blood Bank Practicum	\$50.00
BIOL 3841 Animal Behavior Lab	\$30.00	MLS 4711 Clinical Chemistry Practicum	\$50.00
BIOL 4621 Biological Fluids	\$50.00	MLS 4721 Clinical Microbiology Practicum	\$50.00
BIOL 4631 Clinical Immunology	\$50.00	MLS 4731 Immunology & Infectious Diseases Practicum	\$50.00
BIOL 4641 Hemotology & Hemostasis	\$50.00	MUSE 1051 Marching Band	\$60.00
BIOL 4671 Clinical Microbiology	\$50.00	MUSL 0011 A-W Applied Lessons for Non-Majors	\$325.00
BIOL 4921 Capstone Experience	\$50.00	MUSL 1111A Applied Lessons for Musical Theater Majors	\$100.00
BIOL 4941 Biology Senior Seminar	\$30.00	MUSL 1121A Applied Lessons for Musical Theater Majors	\$100.00
BIOL 4971 Independent Research in Biol Sciences	\$50.00	MUSL 2111A Applied Lessons for Musical Theater Majors	\$100.00
CAMS 3131 Photojournalism	\$40.00	MUSL 2121A Applied Lessons for Musical Theater Majors	\$100.00
BRDG 1011 Reading and Vocabulary 1	\$100.00	MUSL 3111A Applied Lessons for Musical Theater Majors	\$100.00
BRDG 1111 Reading and Vocabulary 2	\$100.00	MUSL 3121A Applied Lessons for Musical Theater Majors	\$100.00
BRDG 1201 Listening and Speaking 1	\$100.00	MUSL 1211A Applied Lessons for Musical Theater Majors	\$100.00
BRDG 1221 Listening and Speaking 2	\$100.00	MUSL 1221A Applied Lessons for Musical Theater Majors	\$100.00
CHEM 1551 Chemistry for Engineering Lab	\$30.00	MUSL 2211A Applied Lessons for Musical Theater Majors	\$100.00
CHEM 1711 General Chemistry 1	\$30.00	MUSL 2221A Applied Lessons for Musical Theater Majors	\$100.00
CHEM 1721 General Chemistry 2	\$30.00	MUSL 3211A Applied Lessons for Musical Theater Majors	\$100.00
CHEM 1811 General Chemistry 1-Majors	\$30.00	MUSL 3221A Applied Lessons for Musical Theater Majors	\$100.00
CHEM 1821 General Chemistry 2-Majors	\$30.00	MUSL 4211A Applied Lessons for Musical Theater Majors	\$100.00
CHEM 2311 Analytical Chemistry 1	\$30.00	MUSL 4221A Applied Lessons for Musical Theater Majors	\$100.00
CHEM 2551 Organic Chemistry Lab 1	\$30.00	MUSL 1211B Applied Lessons for Musical Theater Majors	\$125.00
CHEM 2561 Organic Chemistry Lab 2	\$30.00	MUSL 1221B Applied Lessons for Musical Theater Majors	\$100.00
CHEM 2651 Organic Chemistry Lab 1-Majors	\$30.00	MUSL 2211B Applied Lessons for Musical Theater Majors	\$125.00
CHEM 2661 Organic Chemistry Lab 2-Majors	\$30.00	MUSL 2221B Applied Lessons for Musical Theater Majors	\$125.00
CHEM 3151 Biochemistry Lab	\$30.00	MUSL 3211B Applied Lessons for Musical Theater Majors	\$125.00
CHEM 3261 Medicinal Chemistry Lab	\$30.00	MUSL 3221B Applied Lessons for Musical Theater Majors	\$125.00
CHEM 3411 Physical Chemistry 1	\$30.00	MUSL 4211B Applied Lessons for Musical Theater Majors	\$125.00
CHEM 3421 Physical Chemistry 2	\$30.00	MUSL 4221B Applied Lessons for Musical Theater Majors	\$125.00
CHEM 3601 Organic Synthesis	\$30.00	MUSL 3301 Half Recital	\$200.00
CHEM 3751 Inorganic Chemistry 1 Lab	\$30.00	MUSL 3311 Junior Recital	\$350.00
CHEM 4161 Advanced Biochemistry Lab	\$30.00	MUSL 4311 Senior Recital	\$350.00
CHEM 4321 Analytical Chemistry 2	\$30.00	NURS 2101 Physical Assessment	\$130.00
CJ 3021 Criminal Justice Seminar	\$60.00	NURS 2301 Fundamentals of Nursing	\$130.00
EAP Program Fee per Term	\$25.00	NURS 3101 Medical Surgical Nursing 1	\$130.00
ECCS 2311 Electric Circuits	\$25.00	NURS 3501 Nursing Care of the Developing Child and Family	\$130.00

NURS 4401 Medical Surgical Nursing 2	\$130.00
NURS 4981 Transition to Professional Practice	\$25.00
PLSC 3021 Nature Center Seminar in Political Science	\$90.00
PLSC 4751 Model UN	\$60.00
PLSC 4761 Mock Trial	\$35.00
PSYC 3151 Learning & Behavior w/Lab	\$35.00
PSYC 3251 Cognitive Psychology w/Lab	\$35.00
PSYC 3301 Sensation Perception w/Lab	\$35.00
PSYC 3351 Physiological Psychology w/Lab	\$35.00
PSYC 3401 Experimental Psychology w/Lab	\$35.00
PSYC 4961 Senior Capstone in Psychology II	\$35.00
RELG 2051 Issues in Science and Religion	\$75.00
TECH 1301 Materials Science	\$50.00
TECH 1601 Electronics	\$50.00
TECH 3461 Digital Photography	\$50.00
TECH 4921 Programming in Embedded Systems	\$100.00
TECH 4961 Tour of Industries	\$80.00

Scholarships and Financial Aid

Ohio Northern University's Office of Financial Aid administers a comprehensive financial aid program designed to help you meet your demonstrated needs. We make every effort to understand your financial circumstances so that the assistance you receive fairly reflects your ability to contribute to your education expenses.

Student Eligibility

Each applicant for student aid should complete the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. Parents and/or students are encouraged to submit the FAFSA as early as possible. Eligibility for federal and state financial assistance (grants, loans and work opportunities) will be determined from information submitted on the FAFSA.

To qualify for institutional financial assistance, students must be enrolled full-time and degree seeking. Institutional financial assistance is not available to students for summer term or to students who already hold a bachelor's degree, though federal assistance may be available.

Please note: All financial assistance programs are awarded assuming full-time enrollment and a nine-month academic school year. Funds provided are divided into two equal awards for semesters. If a student attends for less than a full nine months, his/her aid is reduced accordingly. (Example - a \$6,000 scholarship will provide \$3,000 per semester, but the student must be in attendance for two semesters to receive the full amount.)

Satisfactory Progress Standards for Financial Aid

Students attending Ohio Northern University are required to complete their academic programs in a total time frame equal to no more than 150% of the normal time that it takes to complete their degree, while also meeting minimum GPA requirements. Further information relative to the satisfactory progress standards and exceptions or appeals are referred to at onu.edu/SAP

Types of Financial Assistance

Federal Grants

Federal Pell Grant The FAFSA should be filed for this federal grant (the maximum award is \$5,775 for 2015-16). Based upon the FAFSA information, students will receive an ONU Award Notice indicating their Pell eligibility.

Federal Supplemental Education Opportunity Grant (SEOG) The FAFSA should be filed for this federal grant which requires a high need and Federal Pell eligibility to qualify. The grant amount is determined by the aid office.

TEACH Grant To qualify, students must be going into a career in teaching and must commit to teach full-time at a Title I school in a "high-need" field for at least four years within eight years of becoming a highly qualified teacher. The maximum award per year is \$4,000. Other requirements and restrictions apply. Please contact the Financial Aid Office to apply for this grant.

State Grants and Scholarships

Ohio College Opportunity Grant Awarded to Ohio residents based upon need. Students must file the Free Application for Federal Student Aid no later than October 1 of the award year and attend an Ohio College or University. The Expected Family Contribution (EFC) will be the index number for awarding the Ohio College Opportunity Grant. The funding for this grant is subject to the budget of the state of Ohio.

Pennsylvania residents should ask their high school guidance counselors about a grant from their state. Pennsylvania will send eligible students' approvals for an award directly to ONU.

Choose Ohio First Scholarship This scholarship is awarded to Ohio residents who pursue STEM education degrees at ONU. The maximum award for 14-15 was \$6,200. Students must have a minimum 23 ACT (or SAT equivalent) and a 3.0 GPA. The scholarship application is located at onu.edu/chooseohiofirst.

Institutional Grants and Scholarships

ONU General Grant The FAFSA form must be filed for this university grant award based on need. The amount is determined by the aid office.

ONU Methodist Crusade This application can be obtained from ONU's aid office for members of an Ohio United Methodist Church. Students must show a need on the FAFSA to qualify for this \$1,000 per year grant.

Ohio Northern University Scholarships

Scholarships provided by Ohio Northern University recognize outstanding achievement by high school students. Financial need is not a requirement. To receive a scholarship, students must generally rank in the upper 10% of their high school class, have a high composite ACT score or a high combined SAT score, high GPA and strong participation in extra-curricular activities. Ohio Northern will superscore ACT and SAT test results for scholarship purposes.

ONU scholarships are awarded for four years to each recipient. For Pharmacy students there is a separate scholarship program for the fifth and sixth years.

A prospective student must apply for the scholarship by completing an application for admission. Students are automatically considered for scholarships (if minimally qualified) upon initial review of the admission application.

United Methodist Ministerial Deduction An application (from ONU's aid office) should be submitted for students who are unmarried, legal dependents of United Methodist Ordained Elders in full connection, in good standing, and under full-time appointment by the Annual Conference. Eligible students must be seeking their first baccalaureate degree. A tuition reduction is available to those students who qualify. The reduction applies for four academic years and does not apply for summer school. This award also applies to children of retired or deceased United Methodist ministers with the same credentials.

ONU Matching Grant for Churches Ohio Northern will match any church awarded scholarship up to \$1,000 per year. The match is on a dollar-for-dollar basis up to, but not exceeding, established financial need. The application deadline is May 1 of each year. The application can be found at onu.edu/finaid under "Policies and Forms".

ONU Legacy Award Awarded to legally dependent (defined by IRS) sons or daughters of ONU graduates or a prospective student who already has a sibling enrolled full-time at ONU. This award is for first-time freshman and new transfer students entering in 2015-16 and beyond. Financial need is not a factor.

ONU Dimension Award This award is provided to qualified students from diverse backgrounds who demonstrate an extra dimension offered to the general student body. Awards start at \$1,000 and are coordinated with other available funds. Financial need is not a factor.

ONU Out Of State Recognition Award This award is offered to all accepted new and transfer undergraduate students whose permanent residence is outside of the state of Ohio. This is for first-time freshman and new transfer students. Financial need is not a factor.

ONU Talent Award These awards are available to students accepted into the departments of Art & Design, English or Music, students majoring in musical theatre or theatre, and students with a minor in dance. Orchestral and Choral awards are available for non-music majors. An audition and/or portfolio review is required for talent award consideration.

Student Loans

The first three loans all feature federal interest subsidy and loan principal deferment. The government pays the interest on the loan until the student no longer attends college at least half time. Loan repayment does not generally begin until the grace period elapses. These loans can also be deferred again for graduate school.

Federal Perkins Loan A FAFSA must be on file showing a need for this 5% interest rate loan. The controller will electronically send a notice to sign the promissory note to eligible students. ONU is the lender for this federal program and the grace period for new borrowers is nine months.

Health Professions Loan The FAFSA must be on file, with financial need being established as a dependent student, to be eligible for this 5% interest rate federal student loan. The loan is for Pharmacy students only and ONU is the lender. The grace period is 12 months. An application must be completed through the financial aid office.

Federal Subsidized Loan This federal program allows freshmen to borrow up to \$3,500 per year, sophomores, up to \$4,500 per year, and juniors and seniors, up to \$5,500 per year. The aid office will determine eligibility. The student should maintain Satisfactory Academic Progress. For undergraduate students, the interest rate is set at a fixed rate of 4.29% for 2015-16. A 1.073% default fee is subtracted by the federal government before the loan is disbursed to the student account. The grace period is six months. The application for the loan is located at studentloans.gov.

Federal Unsubsidized Loans (dependent students) are available to students who were either limited or determined to be ineligible for the Federal Subsidized Loan. The amounts per grade level are the same as for the Federal Subsidized Loan; however, the student is responsible for interest charges while in school. Interest may be paid by the student or deferred and capitalized. The interest rate was a fixed 4.29% for 2015-16. A 1.073% default fee is subtracted by the federal government before the loan is disbursed to the student account. Additionally all undergraduate dependent students are eligible to borrow \$2,000 of unsubsidized loans beyond the subsidized limits established.

Federal Unsubsidized Loans (independent students) The terms for this loan are the same as for dependent students. The amounts are up to \$4,000 for freshmen and sophomores; \$5,000 for juniors, seniors and fifth-year students. Graduate students can use up to \$20,500 per year at a 5.84% fixed interest rate.

Federal Parent PLUS Loan A parent may borrow this loan for their undergraduate dependent student to assist in covering the cost of their education. These loans have a 6.84% interest rate in 2015-16. A 4.292% default fee is subtracted by the federal government before the loan is disbursed to the student account. The amount borrowed can be up to the cost of education minus financial aid per year. Repayment usually begins 30 days after the last disbursement but deferment while a student is enrolled is available. Family income is not a criterion in obtaining parental loans. A good credit history is required. The application for the Parent PLUS loan is located at studentloans.gov.

Private Student Loan This is a resource for credit-worthy students to help with their educational costs. A credit-worthy cosigner is usually required. The maximum amount the borrower is eligible to receive is the cost of education minus all other financial aid. This loan is available through a variety of lenders. The interest rate varies and is based on credit. The origination fee is determined by each lender with some offering loans with 0% fees. For some private loans the repayment of principal and interest begins after graduation or when the enrollment status drops below half-time. Other private loan options require an interest-only payment while enrolled in school. The length of repayment is based on the loan balance. There is no penalty for prepayment. A list of optional private loan lenders can be found at onu.edu/loans.

Campus Employment

The **Student Employment Program** allows students to work on campus to offset educational expenses. Jobs are primarily awarded on the basis of financial need through the Federal Work Study Program, although skills and experience is a consideration. A 15-hour week is the work limitation and paychecks are issued directly to students every two weeks. Students can search and apply for open jobs at <https://onu-csm.symplicity.com/>.

Campus Student Life

Policies

Policies relating to student life are available in the Student Handbook, published on the Student Life web page. Students are expected to conform to those requirements.

Residence Life

As a residential campus, all Ohio Northern full time students are expected to reside in University housing, which includes all residence halls, affinity housing, apartments, and Greek housing on and off campus.

Priority for apartments and affinity housing is granted based on credit hour status. There are single, double, triple and quad bedroom apartment units available. Each apartment is equipped with its own kitchen and living room. The university may alter these arrangements to accommodate student housing needs.

The university has a total of 22 residential buildings. All residence hall rooms are furnished with window treatments, beds, mattresses, desks, closets, ONU cable television hookup, and wireless or high speed computer connection capability. Every student that is residing in an on campus housing assignment has free access to use the washers and dryers, and recreation equipment. Many living spaces include fitness centers.

In accordance with the University Housing Policy (as stated in the Student Handbook, page 20) at least one of the following criteria must be met in order for a student to move out of the residence halls at the beginning of an academic year:

- 3 years (6 semesters) in the residence halls or apartments
- 23 years of age
- Proof of permanent residence of a parent, grandparent, or sibling, within a 30-mile drive of campus for commuting
- Proof of an undergraduate degree
- Proof of having served in the armed forces and qualified for veterans' benefits
- Proof of marriage

If you do not qualify for any of the above criteria, you are NOT eligible to live off campus. Please print, complete, and submit the Off Campus Housing form for review, verification and approval process to the Res Life Office. If you have any questions please email reslife@onu.edu. In addition to completing the Off Campus Housing form, all students leaving ONU housing to live off campus must attend one Good Neighbor Meeting. The Good Neighbor Meetings are a collaborative effort by the Village of Ada and ONU and include presentations by the Chief of the Ada Police and the Ada Mayor, as well as presentations from Financial Aid, Student Conduct, and Residence Life.

Once a housing commitment has been made, it is for the entire academic year, fall and spring semester. Residents are not permitted to move from the residence halls, apartments or affinity housing to off-campus housing or Greek housing at any time during the academic year.

Because of the need for maximum security during break periods, access to halls is limited. All residence halls and affinity housing are closed between terms with the exception of apartment housing. Any student that chooses to stay during ONU approved breaks are to check in at The Office of Residence Life. In order for the student's access to residence halls to remain active, this information will be shared with campus security.

The Office of Residence Life will attempt to house all students in single, double, triple or quad occupancy spaces. However, when housing demand exceeds capacity, other living arrangements may be used. These arrangements may include the tripling of double occupancy rooms, University owned houses and/or the conversion of floor lounges to quad suites.

Requests for particular roommates should be submitted mutually by both parties through The Housing System or an email to The Office of Residence Life. There is no guarantee that all requests will be honored. New students will receive room assignments via email after the summer orientations have been completed.

The roommate selection process and the housing lottery, for returning students begins in spring term. Assignments will be available on-line.

Dining Services

All students living in ONU residence halls and all affinity housing are required to be on a meal plan. Students who are assigned to an ONU on-campus apartment do not have to be on a meal plan. Students residing in an ONU on-campus apartment will receive 300 dining dollars. Off-campus Greek students, commuting or approved off-campus students have the option to purchase meal plans or pay per meal. Students who are living in a Greek on campus assignment are required to be on the Greek 8 Meal Plan. The White Bear Inn restaurant and faculty staff dining room are in McIntosh Center and open to everyone. Sodexo Dining Services operates these facilities and caters all banquets held on campus. Northern On Main is located across from the University and provides dining options.

Student Health Center

The University Physician and a Certified Nurse Practitioner hold regular office hours Monday through Friday in the Student Health Center. In addition, registered nurses are on duty Monday-Thursday 7:30 a.m. - 11 p.m., Friday 7:30 a.m. - 4 p.m., on Sunday 3 p.m. - 11 p.m. and on call weekends. During summer semester a registered nurse is on duty Monday-Friday with limited hours.

The University recommends that all students make full use of the Student Health Center. All medical records are confidential, and only at the student's written request will the University Health Center supply information to another doctor.

All students entering the university are required to submit a complete medical history, including a current immunization record.

Students who suffer from allergies may receive their allergy injections at the Health Center if they supply the serum and specific directions from their doctor or allergist.

Student Health Insurance – All students who attend Ohio Northern University are required to have health insurance coverage. The university offers a student medical plan that provides healthcare coverage through United HealthCare. Keep in mind, enrollment IS AUTOMATIC for all students unless a waiver is completed, on-line and submitted to the Controller's Office by the due date. After the due date, the charge will remain and will become the responsibility of the student.

Counseling

The University provides counseling services for all enrolled students. Spouses of students are also eligible for couples counseling. The Counseling Center is staffed by licensed mental health professionals who are available Monday-Friday throughout the school year, including summer session. The Counseling Center staff adheres to a professional code of ethics in providing confidential services.

Students can receive help from the Counseling Center staff in order to better understand and resolve their difficulties. Some commonly presented concerns include loneliness, depression, homesickness, substance abuse, feelings of inadequacy, anxiety, roommate conflicts, relationship problems, loss or grief, and stress situations. The staff makes every effort to create an atmosphere where personal concerns of any type can be examined and discussed freely and confidentially.

The Counseling Center provides career and educational counseling. Interest inventories and other tests may be used to help students make meaningful decisions about their career paths. The staff also provides assistance to students struggling with academic difficulties such as study habits, time management, procrastination, and test taking.

Any student interested in making an appointment can contact the Counseling Center directly; no referral is necessary. Evening appointments are available on Wednesdays.

Polar Careers

The Office of Polar Careers helps students as they prepare to make the transition from college to graduate/professional school and/or the world of work. Although not an employment agency, the office serves as a liaison between students, alumni, and potential employers by making job referrals, distributing vacancy notices, and conducting on-campus recruiting programs. Other services and programs include an academic course titled AASG 3001: Job and Graduate School Strategies, job fairs, individual consultation and coaching, seminars, and classroom presentations. By utilizing the services of this office, students will gain a better understanding of the job market and the methods used to conduct a successful job search, as well as strategies geared toward acceptance to preferred graduate/professional schools. A separate career services office is maintained by the College of Law.

Office of Multicultural Development

The primary mission and objective of the Office of Multicultural Development and International Services is to foster an environment conducive to the matriculation, retention, and graduation of diverse students at Ohio Northern University. In addition to discussing the recruitment and retention of minority students, the staff is intensely committed to an action-oriented approach to building a campus community that fosters academic excellence, diversity, equity, and cultural pluralism. Special emphasis is placed on promoting student retention by sponsoring programs that address the needs of students on a personal, academic, social and cultural level. Equally critical is the role staff plays in promoting an environment favorable for academic success where appreciation, respect and understanding of cultural diversity are encouraged.

The Office sponsors a number of programs and services that are designed to cultivate scholarship, social and intellectual engagement, and cultural awareness. Program efforts include, but are not limited to:

- Dimension Award Scholars Program
- International Student Orientation
- Opening the Way Multicultural Reception
- Polar Pals Mentoring Program
- Cultural Conversation Hour Series

The entire Ohio Northern family is encouraged to actively engage in our endeavors to reach the goal and mission of a truly diverse University Community.

Religious Life Program

As a United Methodist Church-affiliated university, Ohio Northern recognizes the importance of faith in the life and education of its students. Opportunities are available for students and faculty to examine, develop, and practice their religious and spiritual traditions in formal and informal settings. The non-academic emphasis is the concern of the Office of the University Chaplain and the Religious Affairs Committee, composed of students and faculty.

In the midst of west campus is Wesley Center, which consists of the English Chapel and the Burgett Pavilion. English Chapel houses the chapel sanctuary, meeting room, prayer room, and multi-faith room. The Burgett Pavilion houses the academic department of philosophy and religion (which includes a conference room and an area for the administrative assistant), three classrooms, office of the University Chaplain and the chaplain's administrative assistant, office for religious life staff, and a lounge. The chaplain is available to students seeking spiritual and personal counsel, spiritual direction, and friendly conversation. The Chaplain also coordinates "Get Connected ONU," a program that aims to connect student volunteers to area non-profit organizations that need volunteer help. Throughout the year, the Chaplain's Office will also sponsor retreats, spiritual formation groups, and other opportunities for spiritual growth.

The Religious Life Program seeks to help students develop a mature, thoughtful, and relevant faith that will serve them well in contemporary society. The spirit of the activities is ecumenical and interfaith. An emphasis is placed on spiritual nurture and the ethics that develop in a maturing faith. Emphases are placed on spiritual formation, worship, and service. Opportunities are available through student groups to reach out and put faith into practice. Each student is free to choose the extent of his or her participation.

Chapel is held each Thursday at 11 a.m., beginning with a communal meal and fellowship time. Attendance is voluntary and is encouraged by scheduling it during an open hour. In addition, weekly prayer is held one afternoon each week. This reflective service in the liturgical tradition is an opportunity for members of the campus community to meet together to pray for the campus, the community, and the world.

Congregations in the Village of Ada and in surrounding communities always welcome students. In Ada, those churches include: First United Methodist Church, First Presbyterian Church, St. Mark Lutheran Church, Our Lady of Lourdes Roman Catholic Church, Church of Christ Disciples, First Baptist Church, and Grace Gospel Church, and Ada Family Center. Temple Beth Israel-Shaare Zedek is located in Lima. There is a mosque in Toledo. Friday prayer service for Muslims is held on campus.

RELIGIOUS LIFE ORGANIZATIONS AND PROGRAMS

A wide variety of religious life organizations provide opportunities for worship, fellowship, outreach, and service both on and off campus.

Religious Life Staff

Five students serve as members of the Religious Life Staff, overseeing several important areas of campus ministry, including:

Ada Friends Coordinator
Programming Coordinator
Technical Team Coordinator
Community Relations Coordinator
Music Coordinator

Ada Friends

A mentoring program similar to Big Brothers/Big Sisters.

Agape Improv

A Christian theatre outreach team that performs short skits

Christian Pharmacy Fellowship International

A worldwide, interdenominational ministry of individuals working in all areas of pharmaceutical service and practice.

Christian Legal Society

A nationwide organization of lawyers, law students and others in the legal field who seek to serve Jesus Christ.

Fellowship of Christian Athletes

A group that is open to anyone (no need to be an athlete) to enjoy a great time of friendship, fellowship and gathering into the Word of God.

Gospel Ensemble

A vocal outreach team that travels to churches singing primarily contemporary gospel music and frequently a cappella.

Habitat for Humanity

Habitat's mission is to eliminate substandard housing worldwide by building decent, inexpensive, adequate homes for families who need them.

Kappa Phi

A Christian women's service organization.

Merge

Weekly group spiritual direction; time is spent each week in silent meditation, followed by conversation about important life issues, with an eye toward spiritual growth.

Muslim Student Association

Students whose purpose is to promote unity and inter-religious dialogue and understanding.

Newman Club

A student-run organization that serves the ONU Catholic community.

Northern Chimes

A bell choir outreach team that spreads God's word through their music and Bible verses.

Northern Christian Fellowship (NCF)

Works alongside Campus Crusade for Christ with the goal of providing a welcoming environment, using small groups, discipleship pairs, and a large group gathering, called Fusion, on Thursday evenings.

Pre-Ministry Students

Students who are considering entering seminary or a church vocation; open to anyone interested in talking about professional ministry.

Sigma Theta Epsilon

A national Christian service fraternity.

Son's Rays

A vocal outreach team who brings the message of Jesus Christ through song and testimony.

Tech Team

A team that provides audio and visual support for chapel programs.

Ultimate Faith

An outreach team that leads retreats for youth groups.

Worship Band

A musical group open to all types of musicians and singers that leads worship music during weekly Chapel.

Special Events

Throughout the year, the university and various student committees bring to the campus a variety of cultural and entertaining programs. The Cultural Affairs and Special Events Committee administers the Artist Series, which sponsors performances by professional performing artists as well as a series of foreign movies. The department of music presents a faculty recital series; band, choral and ensemble concerts; and student recitals. The College of Law sponsors a lecture series.

Theatre productions, athletic events, concerts, Greek events plus club and organization activities provide a wide range of special events.

Alcohol Consumption

The University affirms its historic belief that the consumption of alcoholic beverages is not beneficial to the academic environment of the University.

Alcoholic beverages are permitted to be possessed or consumed by individuals in private areas on campus as long as the laws of the Village of Ada and the State of Ohio are followed. Anyone who possesses or consumes alcoholic beverages must be 21 and must obey all other University rules and regulations and applicable government laws pertaining to the use of alcohol. The sale or dispensing of alcohol in *private areas* is prohibited.

In keeping with the above for purposes of this policy only, the following are defined as *private areas*:

Student rooms in upper class student halls, apartments and fraternity houses where at least one roommate is 21 years of age, with the door to the hallway closed. Unless one of the roommates is 21, alcohol cannot be present in a room in which an underage student resides. If a student resides in an apartment or suite, alcohol must be kept in the bedroom of the student who is 21 rather than in the common area or kitchen.

Alcohol is not permitted in first year housing (Northern House, 5 University Parkway, Maglott, Founders, Park and Stambaugh).

Underage students in the presence of alcohol are in violation of the alcohol policy (unless student is a permanent resident of that private area).

Drinking games of any type are prohibited on Ohio Northern's campus.

Visitation Policy

Guests of the opposite gender may visit the student rooms of residence halls during designated guest hours. Visitation hours are:

New Students in Residence Halls:

5 University Parkway, Founders Hall, Park Hall, Maglott Hall, Northern House, Stambaugh Hall (new student residents)
Sunday - Thursday 10 a.m. - 11 p.m.
Friday - Saturday 10 a.m. - 1 a.m.

Returning Students Not Residing in Apartments:

Affinity, Brookhart Hall, Lima Hall, Roberts Hall
Sunday - Thursday 10 a.m. - 11 p.m.
Weekend Friday 10 a.m. - Sunday 11 p.m.

Student Organizations

GENERAL STUDENT ORGANIZATIONS

Student Senate is the governing body for the students of Ohio Northern University and serves as a liaison between the students and administration. The purpose of the Student Senate is to serve as the official representative group of the student body and to work cooperatively with the faculty, the administration, and the Board of Trustees of the University in the formulation of University policy in matters pertaining to the student body. The Student Senate President serves as a member of the Board of Trustees of the University.

OFFICE OF STUDENT INVOLVEMENT

Greek Life

Ohio Northern University has five national social fraternities and four national social sororities. The Interfraternity Council is the governing body for social fraternities, and the Panhellenic Council is the governing body for social sororities.

The five men's national social fraternities with the dates of their establishment at Ohio Northern are: Delta Sigma Phi, (1920); Phi Gamma Delta (2014), Phi Mu Delta (colony, refounded 2014), Sigma Phi Epsilon, (1905); and Theta Chi, (1966).

The four women's national social sororities with the dates of their establishment at Ohio Northern are: Alpha Xi Delta, (1959); Delta Zeta, (1959); Zeta Tau Alpha, (1959); and Kappa Alpha Theta (1994).

Student Activities

The Student Planning Committee develops and implements social, educational, cultural, and recreational programs throughout the school year, for the university community.

Ohio Northern University has over 200 approved student organizations of a wide variety of interests.

In addition to the Greek life organizations on campus, there are five national professional fraternities and sororities with the dates of establishment at Ohio Northern: Kappa Epsilon (Pharmacy Fraternity for Women), (1957); Kappa Psi (Pharmacy), (2009); Phi Alpha Delta (Law), (1960); Phi Sigma Rho (Engineering/Computer Science for Women), (2002); Rho Chi (Pharmacy), (1962).

Leadership

Leadership development training workshops are held throughout the year to further strengthen the leadership skills of students elected or appointed as campus organizational leaders.

Annually, Omicron Delta Kappa, national leadership honorary, sponsors the President's Leadership Dessert. This formally recognizes the leadership accomplishments of undergraduate students. The DeBow Freed Awards for Outstanding Leadership as a Student, as well as The Alice-Kay Hilderbrand Student Organization of the Year Awards, are announced at this event.

Other services include programming and events in the area of leadership development provided by Leaders' Council and maintaining a Leadership Library of resources and training materials.

HONORARY SOCIETIES

Alpha Epsilon Delta, health pre-professional national honorary.

Alpha Kappa Delta, the international sociology honor society, founded in 1920, is a "non-secret, democratic, international society of scholars dedicated to the ideal of *Anthropon Katamanthanein Diakonesian*" or "To investigate humanity for the purpose of service."

Alpha Lambda Delta, national scholastic society for freshman students who have attained an accumulative average of 3.50 or above during the first semester.

Alpha Mu Alpha, national honorary to promote the advancement of excellence in the field of marketing and to recognize and reward scholastic attainment in marketing subjects.

Alpha Phi Sigma, an honor society which recognizes and promotes high scholarship among students actively engaged in collegiate preparation for professional services, keeps abreast of advances in scientific research,

and elevates ethical standards of the criminal justice professions. Majors, minors, or equivalent in criminal justice who have completed one-third of the units required for graduation and who have a cumulative GPA of 3.00 or better are eligible for membership.

Beta Alpha Psi, international honorary for financial information students that encourages and recognizes scholastic and professional excellence in the business information field. Eligible student members are junior or senior accounting, finance, and information systems majors who rank high academically.

Beta Beta Beta, a national honorary society for students of the biological sciences affiliated with the American Association for the Advancement of Science, seeks to encourage scholarly attainment in this field of learning by reserving its membership for those who achieve superior academic records and indicate special aptitude for the subject of biology.

Beta Gamma Sigma, the national scholastic honor society in the field of business administration recognized by AACSB International—The Association to Advance Collegiate Schools of Business. To be eligible for membership, a student at the junior level must rank in the upper seven percent of that class and a senior must rank in the upper ten percent of that class.

Delta Omicron, international music fraternity for music majors, founded in 1909 to create and foster fellowship through music, to develop character and leadership, and to encourage excellence in scholarship and performance.

Delta Phi Alpha, the national German honors society, seeks to recognize excellence in the study of German and to provide an incentive for higher scholarship. The Society aims to promote the study of the German language, literature and civilization and endeavors to emphasize those aspects of German life and culture which are of universal value.

Epsilon Pi Tau, an international honorary for professions in technology dedicated to the advancement of understanding, appreciation, and awareness of technology as both an enduring and influential human endeavor and an integral element of culture. Juniors and seniors majoring in the department of technology with accumulative grade point averages in the upper 25 percent may be selected to membership.

Gamma Theta Upsilon, an international honorary society founded in 1928, designed to encourage, advance, and strengthen the study of geography as a cultural and practical discipline.

Gamma Sigma Epsilon, a national chemistry honorary founded in 1919, is open to all students who have completed two years of chemistry courses and labs.

Kappa Delta Pi, honorary society in education, encouraging high professional, intellectual and personal growth, and recognizing outstanding contributions to education; juniors and seniors.

Kappa Kappa Psi, national honorary band fraternity for male student members of the university band program.

Kappa Mu Epsilon, national mathematics honor society, recognizing scholastic achievement of undergraduate students in mathematics.

Kappa Pi, national honorary in art, eligibility to membership based primarily on achievement in the field of art.

Lambda Pi Eta, a communications studies honorary designed to recognize, foster, and reward outstanding scholastic achievement.

Mortar Board, national honor society for students, selected during their junior year for outstanding scholarship, service, and leadership.

Ohio Northern University Honor Society of Nursing, the mission of the Honor Society of Nursing is to support the learning, knowledge and professional development of nurses committed to making a difference in health worldwide. Membership is by invitation to baccalaureate and graduate nursing students who demonstrate excellence in scholarship and to nurse leaders exhibiting exceptional achievements in nursing.

Omicron Delta Epsilon, an international honorary society in economics, recognizing scholastic attainment in economics and honoring outstanding achievements in economics; for upperclass men and women.

Omicron Delta Kappa, all-campus national honorary society for all-around campus leaders, founded in 1914.

Order of Omega, a national Greek leadership honorary. The group recognizes juniors and seniors for outstanding leadership across campus and represents the top 3% of Greek members on campus.

Phi Alpha Theta, a national honorary society in recognition of superior achievement in the study of history.

Phi Beta Delta, national honor society for international scholars, founded in 1986, is dedicated to recognizing scholarly achievement of international students, U.S. students who have studied abroad, and faculty and staff who are involved in international activities.

Phi Eta Sigma, national scholastic society for freshman students who have attained an accumulative grade point average of 3.50 or above during the first semester.

Phi Kappa Phi, a national scholastic honorary society for junior and senior students in all academic fields. Seniors in the top eighth of the class may be elected to a number not exceeding one tenth of the class. Students in the highest five percent of the class may be elected in the final term of the junior year.

Phi Lambda Sigma, national pharmacy leadership society; undergraduate students of pharmacy who have demonstrated dedication, service, and leadership in the advancement of pharmacy.

Phi Sigma Tau, the national philosophy honorary awarding distinction to students of high scholastic achievement and seeking to popularize interest in philosophy among the general collegiate public.

Pi Delta Phi, national honorary society in French, recognizing outstanding scholarship in French language and literature and promoting knowledge of France and its culture; juniors and seniors.

Pi Sigma Alpha, national political science honorary, honoring student achievement and encouraging interest in politics and political science.

Psi Chi, the international honor society in psychology, founded in 1929 for the purpose of encouraging, stimulating, and maintaining excellence in scholarship and advancing the science of psychology. Membership in the society is selective and based on high academic performance.

Rho Chi Society, national pharmacy honor society; undergraduate students of pharmacy who are in the upper 20 percent of their class, who have attained a scholastic average of at least "B", and who have completed 70 percent of the scholastic work applicable towards the Pharm.D. degree, including at least 68 hours completed after enrollment in the College of Pharmacy.

Sigma Alpha Iota, International Music Fraternity composed of women college students and alumnae whose mission is to promote interaction among those who share a commitment to music and encourage, nurture and support the art of music.

Sigma Delta Pi, national honorary society in Spanish for upperclassmen who rank high academically.

Sigma Iota Epsilon, the national honorary and professional fraternity for management. Its purpose is to encourage and recognize scholastic excellence and to promote cooperation between the academic and practical aspects of management.

Sigma Pi Sigma, the national physics honor society founded in 1921, honors outstanding scholarship in physics, encourages interest in physics among students at all levels, and promotes an attitude of service of its members to students, colleagues and the public.

Sigma Tau Delta national English honorary endeavors to advance the study of the chief literary masterpieces, encourage worthwhile reading, promote the mastery of written expression, and foster a spirit of fellowship among students specializing in the English language and literature.

Sigma Xi, the scientific research society. Founded in 1886 as an honor society for scientists and engineering, Sigma Xi is an international, multidisciplinary research society whose programs and activities encourage appreciation and support of original work in science and technology, foster interaction among science, technology, and society, and honor scientific research accomplishments.

Studia Socialia Americae, national honor society in social studies. Founded at ONU in 2005. Recognizes academic achievement among students who are pursuing state licensure in social studies as well as academic and professional achievement among educators who hold state licensure in social studies.

Tau Beta Pi, national engineering honorary society. Members at the junior rank must be within the upper 12.5 percent of their class when initiated into the society while the senior student may be within the upper 20 percent of his/her class when initiated.

Tau Beta Sigma, national honorary band fraternity for female student members of the university band program.

Theta Alpha Kappa, the national honorary for students of Religious Studies and/or Theology. Founded in 1976, it recognizes students of high attainment in these fields who also have achieved outstanding grades across the curriculum.

Theta Alpha Phi, a national honorary theatre fraternity, which recognizes superior achievement and high personal standards of character and leadership as demonstrated in sustained active participation in the Ohio Northern theatre programs; for students of sophomore or higher rank.

Upsilon Pi Epsilon, international honorary society for computing disciplines, encouraging and recognizing outstanding talent and high scholarship in the field.

DEPARTMENTAL AND PROFESSIONAL ORGANIZATIONS

Special organizations, many of them chapters of national organizations, are active in all of the colleges of the University. Members of these groups meet regularly to discuss matters of interest in their respective areas: **University:** Black Student Union; Cheerleaders; College Democrats; College Republicans; Latino Student Union; Muslim Student Association; Pre-law Club; Psi Sigma, Student Planning Committee; Leaders' Council; Student Senate; The President's Club; World Student Organization; **Getty College of Arts & Sciences:** Academy of Criminal Justice Sciences; American Correctional Association; American Geographical Society; Arts and Sciences Student Advisory Board; Association for Technology, Management and Applied Engineering; Biology Student Association; College Broadcaster Inc.; Collegiate Middle Level Association; HPSS Majors Club; Mathematical Association of America; Mock Trial; Model United Nations; Music Educators National Conference Student Chapter; National Student Nurses Association; ONU Chapter of the Student Members of the American Chemical Society; ONU Construction Management Association; ONU-Solve (Mathematics Problem Solving Group), Pre-law Society; Professional Association for Design; Professional Association of Medical Laboratory Students; Professional Association of Women in Science; Public Relations Student Society of America; Secondary Education Society; SME (formerly Society of Manufacturing Engineering); Society of Physics Students; Student Chapter of the Association for Supervision and Curriculum Development; Technology Education Club; United States Institute for Theatre Technology (USITT); **T.J. Smull College of Engineering:** American Society for Engineering Education (ASEE); American Society of Civil Engineers (ASCE); American Society of Mechanical Engineers (ASME); American Institute of Aeronautics & Astronautics (AIAA); Association for Computing Machinery (ACM); The Institute of Electrical and Electronics Engineers (IEEE); Joint Engineering Council (JEC); Northern Engineering Without Boundaries (NEWB); Phi Sigma Rho; Polar Robotics Club; The Society of Automotive Engineers (SAE); The Society of Women Engineers (SWE); **Raabe College of Pharmacy:** Academy of Students of Pharmacy (ASP); A.W.A.R.E.; Christian Pharmacists Fellowship International (CPFI); National Community Pharmacists Association (NCPA); Pharmacy Student Council; Student Society of Health System Pharmacists (SSHP); Academy of Managed Care Pharmacy (AMCP); Student National Pharmaceutical Association (SNAPhA); Personalized Medicine Coalition (PMC); **Dicke College of Business Administration:** American Marketing Association; Collegiate Entrepreneurs' Organization; Dean's Advisory Council; Institute of Management Accountants; ONU Healthcare Business

Professionals; Student Investment Group; Society for the Advancement of Management; Society for Human Resource Management; Students in Free Enterprise; **Pettit College of Law**: Agriculture Law; Black Law Students Association (BLSA); Christian Legal Society; Environmental Law Society; Federalist Society; Icelandic Legal Exchange Program; International Justice Mission; International Law Society; LAMBDA Law Students' Association; Law Review; Legal Association of Women; Moot Court; ONU Law Students for Reproductive Justice; Phi Alpha Delta; Public Interest Law Association; Sports Law Society; Street Law Society; Student Animal Defense Fund; Student Bar Association (SBA); Veterans Association; Willis Society Law Honorary; William Howard Taft American Inn of Court.

Musical Activities

The Department of Music sponsors a wide variety of music performing activities for all students. Non-music majors are especially welcome to participate and they constitute a large percentage of the personnel. Academic credit may be earned for participation in musical groups. Non-major talent awards are available for Marching Band/Symphonic Band, Symphony Orchestra, Wind Orchestra, and University Singers. Deadline to audition via Acceptd.com is Feb. 28 of each academic year. See www.onu.edu/music for details.

University Bands: The Marching Band performs for football games and festivals. The Symphonic Band and Wind Orchestra offer students the opportunity to play the finest band literature at concerts, other activities, and on tour. The Athletic Band performs for home basketball games.

Symphony Orchestra: Qualified university students are eligible to perform with the Symphony Orchestra in their full season of concert activities.

Choral Groups: Vocal organizations offer students a wide variety of singing experiences. University Singers, Opera Workshop, A Capella Ensembles and Chamber Singers are select ensembles which offer students a wide variety of performing experiences. Men's Chorus and Women's Chorus are open to all students and perform year-round at concerts, chapel services and many other campus and off-campus functions.

Ensembles: A variety of smaller instrumental and vocal groups available to all students include Jazz Ensembles, Brass Ensemble, Percussion Ensemble, Woodwind Ensemble, String Ensemble, Composer's Workshop Ensemble and various chamber ensembles.

Communication and Media Studies Activities

Communication Studies

Students have a variety of opportunities to participate in conferences as presenters or attendees. Additionally, speakers, workshops and internship and practicum experiences provide students with hands-on opportunities in their field of study. Lambda Pi Eta, the national communication honors society occasionally features social and academic activities as well.

Radio/Television/Broadcasting and Multimedia Journalism

Ohio Northern University is home to WONB, 94.9 FM, a 3,000 watt non-commercial broadcast station. Professionally managed and student operated, WONB is a part of the Department of Communication and Media Studies. WONB provides student opportunities in music programming, news, public affairs and sports announcing, production and programming.

The Freed Center for the Performing Arts also houses ONU Cable TV, Ohio Northern's campus cable system and local origination channel. ONU Cable provides more than 70 channels of educational and entertainment programming. Local campus programming is produced by Multimedia Journalism majors and scheduled over ONU3-TV.

The Multimedia Journalism program utilizes a modern facility with the latest equipment including audio and video production studios and editing suites; a master control room and TV production studio; and remote production equipment. Students in production classes work with Final Cut Pro; AVID; Adobe Premiere; and, Audition software.

Public Relations Student Society of America

The Ohio Northern University chapter of the Public Relations Student Society of America is a professional organization that provides networking, workshops, public relations campaign exposure, internships, community and university service projects, and awards and recognition to students. The PRSSA chapter operates a nationally affiliated student run public relations firm. The ONU PRSSA chapter is sponsored by the Central Ohio chapter of the Public Relations Society of America in Columbus.

Theatre Arts Activities

Dance

The dance program at Ohio Northern University offers a wide range of dance skills to students from master classes with guest artists to performing on the main stage at the Freed Center for the Performing Arts. Participation in the ONU Dance Company provides student dancers the experience of working with professional dance companies.

Theatre

The Department of Theatre Arts provides many theatrical activities and experiences in the Freed Center for the Performing Arts, which contains a 551-seat mainstage theatre and a studio theatre with flexible seating up to 120. All interested university students may audition for mainstage or studio productions, or they may become involved in technical or front house work.

Student Publications

The Northern, the yearbook, contains a record of student activities for the year. Positions on the staff of the year book are open to all students.

The Northern Review is a digital campus newspaper published throughout the regular year. Positions on the staff of the newspaper and yearbook are open to all students.

Polaris is a creative magazine published each semester by and for Ohio Northern students.

Re: Media is a student-produced web magazine.

The *Student Handbook*, which is posted on the ONU web site, is a compilation of rules and information pertaining to student life on campus.

The *ONU Fraternity/Sorority Guide*, is published annually by the Interfraternity Council and the Panhellenic Council.

The *Ohio Northern University Law Review* is a professional legal periodical. Published three times per year, it is subscribed to by the practicing bar, bench, government officials, and legal scholars throughout the U.S. as well as eleven different countries. In addition to student comments, the *Review* publishes articles by noted authors from within the legal community.

Athletics

The purpose of the program of intercollegiate athletics at Ohio Northern is to provide the important educational experiences:

1. To support and broaden modern education.
2. To expose and educate students in legitimate methods of good sportsmanship, in the meaning of wholesome competition, and in the will to win.
3. To serve as a laboratory for the professional approach of those interested in athletic training, exercise physiology, and sport management as a career.
4. To supply wholesome recreation for the participants and other students.
5. To provide a focus for the interest of students, faculty, administration, and alumni.

The athletics program at Ohio Northern is advised by the Committee on Athletics of the University faculty.

Intercollegiate Competition for Men. Ohio Northern participates in intercollegiate football, basketball, baseball, tennis, golf, wrestling, swimming and diving, cross country, indoor and outdoor track, and soccer. Lacrosse will be added in 2015-16. It is a member of the Ohio Athletic Conference and the NCAA Division III.

Intercollegiate Competition for Women. Women at Ohio Northern compete in volleyball, basketball, swimming and diving, tennis, indoor and outdoor track, cross-country, soccer, golf and softball. Lacrosse will be added in 2015-16. Ohio Northern belongs to the NCAA Division III and Ohio Athletic Conference and follows their rules and regulations.

Intramural Competition. Ohio Northern's intramural program is open to all students and encourages participation in physical activities for recreational purposes. The program consists of touch football (men and women), volleyball (men, women and coed), basketball (men and women), softball (men and coed), ultimate Frisbee and indoor/outdoor soccer (coed).

Club Sports. Ohio Northern's club sports program is open to all students who meet membership requirements. Club sports encourage students to be actively involved in creating their own recreational and competitive sport experiences. Current club sports include men and women's water polo, men and women's rugby, men and women's soccer, fencing, men and women's lacrosse, softball, men and women's ultimate Frisbee and men and women's volleyball. All club sports have a faculty advisor, and students wishing to form a sport's club can do so under the guidance and help of ONU's student senate and the Assistant Director of Athletics for club sports.

The Educational Program of the University

Academic Calendar

The Ohio Northern calendar divides the academic year (nine months) into two semesters of approximately equal length, designated as fall and spring for the undergraduate and pharmacy colleges. A summer session of approximately 8 weeks is divided into terms of four weeks. Fall semester ends before Christmas; spring semester begins in January and ends in early May. The College of Law is on a different semester calendar.

University Organization

Ohio Northern University is composed of five colleges. The Getty College of Arts & Sciences is organized into 17 departments each providing one or more majors as a basis for degree programs leading to the Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science, Bachelor of Science in Medical Laboratory Science, or Bachelor of Science in Nursing. The T.J. Smull College of Engineering has three departments which offer Bachelor of Science degree programs with accredited curricula in civil, computer, electrical, mechanical engineering, and computer science. This college also offers a Bachelor of Science in engineering education. The Raabe College of Pharmacy offers the Doctor of Pharmacy (Pharm. D.) degree as a six year program for high school graduates. The Pettit College of Law awards the Juris Doctor degree after successful completion of a three-year course of study. An earned baccalaureate degree from an accredited institution is required for graduation from the College of Law. The College of Law also awards the Master of Legal Letters (LL.M.) in Democratic Governance and Rule of Law.

The Dicke College of Business Administration curricula require a four-year course of study leading to the degree of Bachelor of Science in Business Administration with majors offered in accounting, management, marketing, pharmaceutical business and risk management and insurance. The college also awards the Master of Professional Practice in Accounting (MPPA).

University General Learning Objectives

The general education plan is based on learning outcomes that specify the abilities that ONU expects each student to cultivate through general education. From matriculation and continuing through their educational experiences at ONU, our students will demonstrate:

1. Effective communication (both written and non-written)
2. Critical and creative thinking
3. Scientific and quantitative literacy
4. An understanding of diverse cultures and their effects on human interaction
5. Integration of concepts across disciplines
6. Informed and ethical responses to personal, civic, and global needs
7. Informed responses to aesthetics in art or nature

Evidence of attainment of these outcomes will appear in artifacts produced through individual academic work, collaborative academic work, or co-curricular activities. The artifacts must be graded by the course instructor and may take many forms, including items such as a paper, an examination essay, an oral presentation, etc. These artifacts will be stored in an electronic portfolio. Faculty members will assess the artifacts with a rubric designed specifically for each outcome. A rubric is a performance-based assessment tool that evaluates student performance with regards to specific criteria. The assessment will be reviewed by the University Assessment Committee to further strengthen and document the effectiveness of our general education plan.

Each student at ONU is required to complete the following four courses with a grade of C or better as part of the general education plan:

1. Transitions Experience (1000 level): Offered within the student's college, this course demonstrates ties between general education and the student's major and facilitates the student's transition from high school to college life.
2. Writing Seminar (1000 level): Introduction to college-level writing skills, including critical reading, the formulation of arguments, researching and incorporating outside sources, and writing essays.
3. Extra-disciplinary Seminar (2000 level): This course expands a student's experience beyond the major by exploring a common theme from other perspectives. Each instructor will develop a unique course that reflects the common theme.
4. Capstone (4000 level): The capstone is a high-impact educational activity that a student completes at or near the end of a student's academic program.

Any course that the General Education Committee tags for at least one general education learning outcome is part of the general education curriculum. Those courses that have agreed to participate are known as "tagged." A tag is defined as an indication of a general education learning outcome that a course satisfies. Students can search for the tag information on particular courses through their Self-service banner account or via the registrar's website (Schedule/Catalog search).

A checklist that summarizes the artifact requirements for general education follows. Note that each student's portfolio must contain 20 artifacts, as specified on the checksheet. If a student fails a course, the artifact(s) associated with that course do not meet the general education program requirements. If a student has transfer credit work, there is the possibility that the student will receive a waiver in proportion to the hours transferred. For every six semester hours transferred to the degree requirements, the student receives one waiver for an artifact. However, all students must earn at least one artifact for each outcome and complete the extra-disciplinary and capstone coursework at ONU in order to meet the university general education requirements.

Academic faculty advisors will work with the students each semester to select appropriate courses to meet the degree requirements and to fulfill the general education requirements. Further information regarding general education, artifacts, and the usage of the electronic portfolio will be provided within the student's transition course. The full general education plan is available from the Academic Affairs website under the topic of General Education.

- | | | |
|---|---------------|-----------------------------------|
| 1a. Effective Communication – Writing | | |
| • Writing Seminar | Grade*: _____ | <input type="checkbox"/> Waived** |
| • Senior Capstone | Grade*: _____ | |
| 1b. Effective Communication – Non-writing | | |
| • _____ | Grade: _____ | |
| • _____ | Grade: _____ | <input type="checkbox"/> Waived** |
| 2. Critical, Creative Thinking | | |
| • Transitions Experience | Grade*: _____ | <input type="checkbox"/> Waived** |
| • Extra-Disciplinary Seminar | Grade*: _____ | |
| • Senior Capstone | Grade*: _____ | |
| • _____ | Grade: _____ | <input type="checkbox"/> Waived** |
| 3. Scientific and Quantitative Literacy | | |
| • _____ | Grade: _____ | |
| • _____ | Grade: _____ | <input type="checkbox"/> Waived** |
| 4. Diversity, Human Interaction | | |
| • _____ | Grade: _____ | |
| • _____ | Grade: _____ | <input type="checkbox"/> Waived** |
| 5. Integration of Disciplines | | |
| • _____ | Grade: _____ | |
| • _____ | Grade: _____ | <input type="checkbox"/> Waived** |
| 6. Informed, Ethical Responses | | |
| • _____ | Grade: _____ | |
| • _____ | Grade: _____ | <input type="checkbox"/> Waived** |
| 7. Aesthetics | | |
| • _____ | Grade: _____ | |
| • _____ | Grade: _____ | <input type="checkbox"/> Waived** |
| Two Additional Artifacts | | |
| • _____ Outcome #: _____ | Grade: _____ | <input type="checkbox"/> Waived** |
| • _____ Outcome #: _____ | Grade: _____ | <input type="checkbox"/> Waived** |

*Must earn a grade of a C or better.

**Students with transfer work that counts towards the degree may earn a waiver in proportion to the hours transferred.

The International Study Opportunity

The international dimension of the university's educational program seeks to develop in students an interest, understanding, and appreciation of other peoples and a cultivation of a spirit of world citizenship within the university community. International experiences are encouraged through various academic and nonacademic opportunities. On-campus academic and cocurricular programs bring together the experience and expertise of faculty and students alike in a variety of activities which broaden the international perspective of those who participate. Off-campus opportunities include study abroad, occasional work experiences abroad, and other types of student travel exchanges. Recent programs abroad include summer study tours to Europe, Japan, Korea, and Latin America, a co-op experience abroad in engineering, summer internships abroad in business, theatre performances abroad, and individually designed summer abroad experiences for modern language students. The engineering co-op program provides opportunity for actual work experiences in an industrial engineering company abroad. Student teaching abroad is available by application through limited international sites.

The university is a member of the Institute for International Education, the NAFSA Association of International Educators, the Council on International Educational Exchange, and the University Studies Abroad Consortium (USAC). The University has cooperative exchange agreements with Aalto University School of Business, Mikkeli, Finland; Arnhem Business School, Arnhem, The Netherlands; Dankook University, Seoul, South Korea; Da-Yeh University, Changhua, Taiwan; Glasgow Caledonian University, Glasgow, Scotland; Hanyang University, Seoul, South Korea; Kansai Gaidai University, Osaka, Japan; Ming Chuan University, Taipei, Taiwan; Ritsumeikan University, Kyoto, Japan; Universidad Antonio de Nebrija, Madrid, Spain; University of Eastern Finland, Joensuu, Finland; University of Iceland, Reykjavik, Iceland; and the University of Strasbourg EM College of Business, Strasbourg, France. Additional study abroad opportunities are provided through the university's affiliation with the International Studies Abroad and the Semester at Sea Program.

The University also has program agreements with Studio Art Centers International in Florence, Italy, Burren College of Art in Ireland, Accademia Italiana in Florence, Italy, and University of the Arts in London. The university has a friendship pact and an exchange agreement with Dankook University in Seoul, South Korea.

The Byron L. Hawbecker Travel Fellowship is available for students in the College of Arts & Sciences pursuing study abroad.

Washington Center Program

Ohio Northern University is affiliated with the Washington Center in Washington, D.C. The Washington Center arranges a variety of student internships with federal agencies, legislative offices, private organizations, and non-profit organizations on behalf of students from the four undergraduate colleges. The Washington Center also offers short-term seminars where students can receive academic credit. A limited number of Washington Center scholarships are available for students. More information is available from the undergraduate deans or the academic affairs office.

Academic Programs between Colleges

Majors and Minors between Colleges

A student may complete a secondary academic program and minors by satisfactorily completing the required major and major related or minor requirements of the two departments plus college requirements of his or her college of enrollment only. Students pursuing a degree in the College of Engineering or the College of Pharmacy must be registered in one of those colleges as their primary degree program but may pursue majors or minors only in other colleges. Exceptions to this general policy are that the dual degree program of electrical engineering and computer science is permitted, and all engineering majors except for computer engineering can pursue a computer science minor.

Dual Degree Programs

Students may elect to earn an additional distinct degree from the university. The student must complete a minimum of 30 semester hours beyond the total credit hour requirements for the degree with the lesser number of hours required. Students not meeting this requirement for more than one degree must choose which degree they wish to receive. This choice may not subsequently be changed.

A student following a dual degree program pursues both degrees simultaneously, with permission of the college of enrollment, and under the supervision of an advisor from each of the colleges involved. For students pursuing a degree in either the College of Engineering or the College of Pharmacy, the college of primary enrollment must be one of these two colleges and the tuition charged will be the Pharmacy or Engineering College rate as appropriate.

Students in the College of Engineering are not permitted to have a dual major in computer engineering and computer science.

A student completing a dual degree program must meet all of the requirements established for each degree. Certification of completion of these requirements is made by the college granting a degree.

The university does not guarantee that program additions (e.g., dual degrees, double majors, minors and options) can be completed within the normal time to complete one degree and/or without encumbering additional overload hour fees.

Pre-law Program

Ohio Northern University has developed a unique pre-law program that offers an excellent opportunity for superior students who are preparing for a career in law. The program is open to all students enrolled in any academic department of the Colleges of Arts & Sciences, Business Administration, Engineering, or Pharmacy and to those participating in the 3+3 Law Admissions Program (see below).

Students in the pre-law program select a major and complete the necessary requirements like other students. The University Pre-law Advising Committee, with representatives from each of the undergraduate colleges, the law college, and undergraduate career services, advises students to include in their studies specific courses that encourage and develop (1) reading comprehension and written expression, (2) critical understanding of the human institutions and values with which the law deals, and (3) critical and analytical thinking. The committee also supervises a pre-law orientation course, a Law School Admissions Test (LSAT) preparatory workshop, and a mentoring program involving pre-law students with local attorneys. Members of the committee advise students on related matters such as applying for admission to law school.

Students in the pre-law program will gain automatic admission to the Ohio Northern University College of Law if they (1) maintain an undergraduate grade point average of at least 3.25/4.00; (2) score in at least the 50th percentile on the LSAT; (3) pass the character and fitness review by the Admissions Committee of the College of Law; and (4) are deemed by the law school Admissions Committee to appear capable of satisfactorily completing its program and being admitted to the bar pursuant to ABA Admissions Standard 501. To take advantage of an automatic admission, a student must enroll in the College of Law in the fall semester immediately following the date that the student received an undergraduate degree from Ohio Northern.

Additional information is available through the offices of the deans.

3+3 Law Admissions Program

Ohio Northern University recognizes that certain students have the capacity and readiness to complete their undergraduate education and their law degree training in less than the normally required seven years of study. Ohio Northern University desires to encourage and educationally stimulate these students by providing an opportunity for them to accelerate their course of study by completing both their undergraduate degree and their Juris Doctor degree in approximately six years of full-time study—that is, three years of undergraduate courses and three years of law school.

Admission

For admission to the Pettit College of Law, all participating students must have completed a minimum of 90 semester hours and a minimum of 2 ½ years of residency in their undergraduate college at ONU, including (1) all ONU general education requirements [Note that for the purpose of this program, the hours transferred from the Pettit College of Law during the fourth year will NOT reduce the number of artifacts required for the university general education program]; (2) all courses required for their degree as determined by the primary undergraduate college in which the student is enrolled; and (3) all major requirements as determined by the college or the department or program in which the student is majoring. Participating students will gain automatic admission to the Pettit College of Law, if they meet the following: (1) a cumulative GPA in their undergraduate program of 3.25 or above; (2) an LSAT score at or above the 50th percentile; (3) two

academic letters of recommendation from members of the undergraduate ONU faculty; and (4) a character and fitness record that suggests that the applicant has the requisite maturity and character needed for the practice of law as determined by the faculty and dean of the Pettit College of Law. Participating students who do not meet the conditions for admission listed in (1) and (2) above will, upon the recommendation of their academic advisor for their primary major, be interviewed for admission to the Pettit College of Law, solely for admission to its Summer Scholar Program. Following the receipt by the Pettit College of Law of all required admission materials, the College of Law will review and arrive at an admission decision. The admissions committee of the College of Law reserves the right to conduct an in-person interview of any applicant when arriving at the admission decision.

Program Requirements

The academic requirements are determined by appropriate undergraduate college depending on the student's major in one of the following programs: Business (BSBA), English literature (BA), Chemistry (BA), History (BA), Political Science (BA), Politics, Philosophy, and Economics (BA), Psychology (BA), Religion (BA), and Sociology (BA). Please refer to the major and degree requirements listed in the sections for the Getty College of Arts and Sciences and the Dicke College of Business Administration.

The undergraduate college will accept as transfer credits applicable to the appropriate bachelor degree up to 30 semester credits of course work taken at the Pettit College of Law in which the student received a grade of 2.0 or better. The undergraduate college shall not accept as transfer credits any credits of course work awarded by the Pettit College of Law in which the student received a grade of less than a 2.0. A student's undergraduate GPA for degree-granting purposes in the undergraduate college will be the GPA at the end of the undergraduate phase of the program; grades from the Pettit College of Law are not transferable to the undergraduate college.

The Pettit College of Law will not accept for transfer credit any coursework taken in one of the undergraduate colleges. A student's GPA at the Pettit College of Law will be determined only based on courses for which credit is awarded by the Pettit College of Law.

If a student withdraws from the Pettit College of Law for any reason whatsoever before completing the first year of work, in order to obtain a bachelor degree from ONU, the student shall be required to complete the undergraduate degree in the undergraduate college according to its regular program requirements. Any such student returning to his/her undergraduate college to complete a bachelor degree shall be allowed to transfer all credits for course work completed at the Pettit College of Law with a grade of 2.0 or better.

Tuition and Financial Aid

During the three years in residence in the undergraduate college, students will pay tuition to Ohio Northern University at the undergraduate college rate. During the three years in residence at the Pettit College of Law, students will pay tuition to Ohio Northern University at the law school rate.

During the three years in residence in the undergraduate college and the three years in residence at the Pettit College of Law, financial aid will be calculated in accordance with the relevant college's then-current student eligibility policies. All participating students will be eligible for scholarships and grants made generally available to all incoming students by the Pettit College of Law.

Library

Heterick Memorial Library (1968) provides information resources and services to support course offerings and foster independent study. An open stack arrangement allows easy access to nearly all of the material in the collections. The centrally located facility is named for Dr. Robert Hynton Heterick and Frances Felker Heterick.

The library provides books and periodicals, both in print and electronic form. Collections of CD's, DVD's, videotapes, and microforms are also available. Facilities include individual study carrels, study rooms, a conference room, microform reading and printing devices, copy services, and audiovisual equipment.

Wi-Fi access is provided throughout the building and numerous power and wired network connections are available.

Computer services include a cluster of 32 computers, all of which are connected to the campus local area network. The Spar/Wintzer Music Media Lab provides computer facilities for music students. The library

also maintains POLAR, the University's on-line catalog, as well as offering over 200 computerized services, more than 9000 electronic journals, and a growing number of electronic books over the campus network.

Local collections are supplemented by efficient interlibrary loan services, including OhioLINK, a statewide resource-sharing network.

Librarians are available to help students and faculty identify appropriate sources of information and to use the catalog and other bibliographic materials. Instructional lectures are offered to classes and groups upon request.

Information Technology

The University is among the leaders in offering creative and efficient application of information technology in support of teaching, learning, administrative and student services. Information technologies are integrated into all aspects of University life; enhanced classroom, laboratory, research and living experiences, recreation and communications.

The University provides a heterogeneous environment of computer equipment integrated by local area networks. The campus network is attached to the Internet through a high-speed fiber-optic connection. The campus network is available in every residence hall room and apartment. In addition, wireless networks are installed in academic buildings, libraries and residence facilities. Computer labs are available to students in various academic areas.

Access to the digital campus is through the ONU website giving access to integrated services like e-mail, student records, academic calendar, faculty and student chat sessions, and course information.

Classrooms are equipped with state-of-the-art instructional technology. Students have a variety of technology available for their use including smart boards, video-teleconferencing units, high-end workstations and various software applications.

Students have access to a range of support services including network printing, document scanning, desktop publishing, and videoconferencing capability. In addition students have access to a digital video camera and several digital still cameras.

The Heterick Memorial Library and the Taggart Law Library employ computer technology to better serve the University community. Both libraries are members of OhioLINK, a resource sharing consortium of Ohio academic libraries which allows patrons to locate and borrow materials from other member libraries electronically.

Distance learning and web-based learning instruction is provided using MoodleRooms and BlackBoard Collaborate.

The Writing Center

The Writing Center at ONU aims to help students achieve excellence in writing. Trained student tutors with a passion for writing and helping others provide individual conferences to students working on any writing assignment. Writers of any skill level or major can benefit from having someone else look over their papers. To meet with a peer tutor, appointments can be made in advance or by drop-in at the second floor of Heterick Memorial Library.

Honors Program

The ONU Honors Program has been established to stimulate highly qualified students in any field of study who are capable of meeting academic challenges and who choose to do so. Students are encouraged to develop their full intellectual potential within a continuing community of scholarly excellence that offers exciting and enhanced varieties of academic experiences. Honors Program experiences are designed to nurture students' curiosity, their written and oral communication skills, and their leadership capabilities as well as to provide an opportunity for students to be more actively involved in their education. The Honors Program requirements support the University and College General Education requirements through special seminars, while allowing participants to work closely with faculty members in their major. Additional information about the ONU Honors Program can be found on page 32.

ROTC

The Bowling Green State University provides college-level instruction to Ohio Northern University students interested in either the Air Force Reserve Officers Training Corps (ROTC) or the Army ROTC programs. Further information about either of these programs can be found on pages 34 and 35, respectively

English Language Programs for International Students

English Language Programs serves the needs of second language English learners at Ohio Northern University. The focus of ELP is English proficiency for the purpose of successful academic study at a high quality, American university with both U.S. and international faculty.

Each component of the ELP is directed toward a specific goal: The International Scholar Transition Program is for students whose English and academic skills are mature but need further development and support while beginning academic study at a high standards university. The Intensive English Program is for students who need significant work in English before beginning academic studies or engaging effectively in an English speaking country. While students may begin in either program, the two programs are sequenced and IEP graduates continue through ISTP on the way to full degree study.

Students placed in the Intensive English Program do not enter degree studies until they have met the language requirements for academic study. Students in the International Scholar Transition Program are fully admitted to degree programs and ISTP courses earn academic credit which may be used toward graduation. Further information about the English Language Programs can be found starting on page 28.

Registration Procedure

Registration is completed during the periods assigned and published by the University Registrar. During each term, registration is conducted for the following term. All continuing students are expected to register within the designated period. The student is responsible for the completion of prerequisites for courses for which enrolled and for securing the approvals needed as indicated in the University Catalog. Unless otherwise specified, a grade of "D" or better will satisfy a course prerequisite. The student is expected to complete registration in the prescribed manner and to complete payment fees by the required date to validate his/her registration. Failure to do so can result in the cancellation of the registration, the assessment of the late registration fee, and removal of name from class lists for the term. Delinquent payment of charges will not enable reinstatement in the term for which charges have not been paid. Reregistration of a student whose registration was cancelled because of failure to satisfy fee payment requirements will be permitted only during the late registration period for the term.

Each student is assigned an advisor to assist in curriculum and registration matters. The advisor's signature is required for registration and substantial changes in schedules. Undergraduate students requesting more than 19 hours must have the dean's signature. Law students with fewer than 12 hours or more than 17 must have appropriate prior approval.

Outstanding financial obligations to the University must be paid or satisfactory arrangements made prior to the completion of registration for a subsequent term.

New students may register for fall semester at any one of the summer orientations. New students or re-entry students may also register for fall semester the day classes begin.

The Office of the Registrar will permit another person to register or to change the schedule for a student only under extraordinary circumstances upon recommendation of the student's college dean.

A student may not attend more than one class session unless officially registered for the class in the Office of the Registrar.

Auditors

A student who wishes to attend a class but who does not wish to receive a grade or credit for the course can register as an auditor only during the first seven business days of the term. The course instructor's signature is required. An auditor does not participate in class evaluations. Studio courses, activities courses, and laboratory courses cannot be audited. In lecture/laboratory courses only the lecture can be audited.

Change in Academic Program

To change a major, minor, concentration, or option the student must have a "Declaration of Major" form completed indicating the change(s) and signed by the chair of the department where the new major, minor,

concentration, or option is housed. Next, the student should meet with a financial aid staff member to discuss financial aid implications and obtain a signature on the form. Then the student should obtain a signature from their college dean's office. Finally, the change of major form must be processed in the Office of the Registrar to be official.

Change in Course or Withdrawal

The student is responsible for the courses and sections for which he or she is officially enrolled.

Late registration, addition of courses, change of sections, change from credit to audit or audit to credit will be permitted during the first seven business days of a semester (or equivalent in the summer term).

Dropping Courses from Schedule or Withdrawal from the University

Courses dropped within the first three weeks of a semester will not appear on official reports; courses officially dropped after the third week of the semester will be marked as "W" (official withdrawal).

Courses may be withdrawn (W on transcript) after the end of the twelfth week of a semester to the beginning of final examination week with approval of the dean of the college of enrollment but will be approved only for reason of unusual circumstances beyond the control of the student. The instructor of the course will be notified promptly of withdrawals approved after the end of the twelfth week of a semester and before the beginning of finals. The instructor may make inquiry to the dean of the college of enrollment concerning the circumstances and will be provided the rationale with sensitivity for the student's right to privacy.

Courses may be withdrawn (W on transcript) or a complete withdrawal processed after the beginning of the final examinations or thereafter with approval of the instructor of the course, the dean of the college offering the course, and the dean of the college of the student's enrollment. In the event that there is disagreement with the withdrawal by any of these persons, and the disagreement cannot be resolved, the vice president for academic affairs will provide a decision and inform all parties directly involved. The vice president for academic affairs will report to the Committee on Academic Affairs all withdrawals after the beginning of the final examination week which were not approved by the dean of the college of the student's enrollment, dean of the college offering the course, and the instructor of the course.

For courses scheduled for less than a semester in length, equivalent periods for registration changes will be established by the University Registrar.

Changes of schedule (add-drop) and complete withdrawals are official on the date received in the Office of the Registrar. Courses or sections dropped or added without proper approvals will result in no credit for the course added and an "F" for the course dropped.

A student who wishes to withdraw from all courses for which the student is registered for a semester may do so by initiating an official withdrawal with the student's advisor and submitting the withdrawal form to the following offices for signature — dean of the college of enrollment (if the dean's signature is obtained without the advisor's signature, it is assumed that the signature of the advisor is waived), office of residence life if the student is residing in a University residence hall, and the controller's office. After obtaining the proper signatures, the student must process the form with the Office of the Registrar to be official. Discontinuance of attendance does not constitute an official withdrawal. Failure to officially withdraw will result in failure (F or U) for each course scheduled.

Transfer between Undergraduate Colleges in the University

A student enrolled in one undergraduate college in the University may request transfer to another undergraduate college by initiating a declaration of major form. The signature of the dean of the college in which the student is currently enrolled must be obtained as well as the approval of the dean of the college to which the student is transferring. The student must provide the dean of the college to which the student is transferring copies of all documents relating to academic actions at ONU (suspension, probation, dismissal).

In considering internal college transfers, the University recognizes the need for the student to have the freedom to find the best area of study within total University offerings.

Dismissal

The Ohio Northern student is expected to maintain certain levels of scholarship. A student may be suspended or dismissed for violation of University rules or for continued low scholarship.

Academic Standing

At the end of each semester or summer session the academic standing of each student (except transient and special high school students) enrolled in the University is determined according to the standards established by the college in which the student is enrolled. Specific college regulations on academic probation are detailed in the sections of this catalog on each college.

Academic Probation describes the academic standing of a student who falls below the minimum standard cumulative grade point average but is eligible to continue.

Continued Academic Probation denotes the academic standing of a student who was on probation or continued probation the previous term enrolled, who does not qualify for good standing, and who is eligible to continue in the University.

Academic Suspension is an action which makes the student ineligible to continue in the University for a specified period of time, ordinarily two semesters. A second academic suspension results in academic dismissal.

Academic Dismissal is an action which makes the student ineligible to continue in the University. Normally, students dismissed are not readmitted.

The academic record of an undergraduate student on academic probation or continued academic probation whose grade point average for the semester is below the minimum standard established for his or her college is reviewed by the appropriate committee in the college, at which time the student may be permitted to continue in the University or may be suspended or dismissed for academic reasons. The student has the right to appeal in writing to his or her college an academic suspension or dismissal.

Veterans or Eligible Dependents

Any student receiving Veterans Educational Benefits under Title 38 USC may remain on academic probation for no more than two consecutive semesters unless the veteran is making progress toward the required grade point average and is allowed to remain in school by the decision of the appropriate academic committee for his or her college.

Grades and Quality Points

The value of credit courses is expressed in semester hours. Our definition of a credit hour is based on the Carnegie Unit, which has stipulated that one semester credit hour be awarded for fifteen sessions of 50-minute duration in classroom lecture-recitation, each requiring two hours of outside preparation by the student. This minimum standard does not restrict a higher standard that requires more student work per credit hour. See the ONU registrar's web site for further definition.

Ohio Northern, except the College of Law, uses the four point system in calculating grade point average. Grade meanings and their equivalent point values are: A-Excellent, 4 points; B-Good, 3 points; C-Average, 2 points; D- Passing, 1 point; F-Failure, 0 points.

In the College of Law a plus and minus letter grade system is used: (A+: 4.33; A: 4.00; A-: 3.67; B+: 3.33; B: 3.00; B-: 2.67; C+: 2.33; C: 2.00; C-: 1.67; D+: 1.33; D: 1.00; D-: 0.67; F: 0.00). In certain clinical courses, the mark of S or U will be given.

The following grades or marks are not computed in calculating grade point averages: I-Incomplete; W-Official Withdrawal; S-Satisfactory, equivalent to "C" or better; U- Unsatisfactory (no credit earned towards graduation). Marks of I are given only with the dean's approval for documented reasons generally beyond the student's control.

All Incomplete ("I") grades must be removed within 12 weeks after the beginning of the next regular semester for which the student is enrolled unless the time is extended by the Dean of the College in which the student is registered. The grade will be converted to a failing grade if this time limit is not observed.

The cumulative grade point average is derived by dividing the total number of graded hours for which the student has officially registered into the total number of quality points earned and rounding the resulting number to two decimal places. The semester point average is determined

in the same way. A cumulative grade point average of 2.00 is the minimum for graduation. In the undergraduate colleges, except as specifically noted by the College of Pharmacy, if a student repeats a course, except those that may be repeated for credit, only the last grade earned is used in calculating the grade point average and applied toward graduation requirements. However, the original grade remains on the student's official academic record and transcript. If a student exceeds the credit allowed in a course with a repeat credit limit, the most recent credit and grade are 'Included' in GPA calculation, and beginning with the earliest enrollment, hours and grades in the course(s) are 'Excluded' until the student's credit is at the repeat credit limit. Only the course work taken at Ohio Northern University is used in calculation of grade point average.

The student is responsible for knowing the total maximum credit allowed in courses which may be repeated for credit.

A student who attains a 3.50 or better average on 12 or more graded hours (A,B,C,D,F) for a semester is placed on the Dean's list. Special, transient, or postgraduate students are not eligible for the recognition.

Entry of a grade (A, B, C, D, F) or a mark of (I, S, U) on the permanent record of a student is upon authorization of the faculty member teaching the course, except for an "F" or "U" recorded by the Registrar for a lapsed "I".

At the end of each spring semester all undergraduate degree seeking students are ranked numerically based on their cumulative average within their spring semester class by college. Such information may be obtained from the office of the college dean.

Grade Reports

At the end of each semester a student's grades are available for viewing via Self-Service Banner. Grade reports are not mailed to the individual student.

Under the Privacy Act of 1974 as amended, the educational records of students enrolled in postsecondary institutions cannot be released without the student's written authorization. Transcripts may be ordered through the National Student Clearinghouse.

Final Examinations

It is the University policy that a final examination must be given in all courses of instruction. Recognizing that in some courses final examinations are either impractical or unnecessary, exceptions to this policy can be made with the approval of the department chairman and the dean of the college in which the course is offered. Independent study, student teaching, individual lessons, physical education activities courses, performance groups, class piano are exempt from this requirement.

The normal examination period for each section will be based on regular meeting time and days of the class. Some departmental multiple section examinations are scheduled.

All students are expected to be present for final examinations. Absences from final examinations, with the reasons for the absences, must be reported immediately to the faculty member or Vice President of Student Affairs, if the student is unable to contact the instructor individually. Absences other than for reasons of illness or other unavoidable circumstances will result in the final examination grade being calculated as a failure in determining the final course grade.

A student with an "A" in the course may be excused from the final examination by the faculty member.

Class Attendance

The policy of the University is that all students are expected to attend all classes, including examinations. It is realized, of course, that not all students will or can possibly attend all classes. Absences from class fall into three main categories: a) absences because of other class activities; b) absences because of official University functions and activities; and c) absences because of personal reasons.

Regardless of the reasons for absence, it is the student's responsibility to contact his/her faculty member (preferably before the absence) so that mutual agreement may be reached concerning work to be completed and how course grade will be determined in light of absences.

Student Academic Conduct

Ohio Northern University students have an obligation to maintain the highest standards of ethical conduct. The University expects its students to conduct themselves in a dignified and honorable manner as mature members of the academic community and assumes that individually and

collectively they will discourage acts of academic dishonesty. The University also expects cooperation among administrators, faculty, staff and students in preventing acts of academic dishonesty, in detecting such acts, reporting them, and identifying those who commit them, and in providing appropriate punishment for offenders.

Minimum standards of academic conduct ensure fairness, honesty, and integrity in the evaluation of student performance. Faculty should be confident that their evaluation methods will not be willfully invalidated by students intending or attempting to misrepresent the skill, achievement, or ability either of themselves or of others. Students, on the other hand, should be confident that a fair comparison of their work with that of other students has not been subverted by unethical conduct.

A complete copy of the Code of Student Academic Conduct may be found in the Student Handbook.

Student Review of Examinations

A student has the right to review and discuss with the faculty member any examination and/or evaluation instrument within a reasonable period of time following the student's request for review.

Grade Appeals Procedure

A student has the right to appeal a final course grade which the student feels is unfairly or erroneously assigned. The student must first discuss the grade with the faculty member(s) who assigned the grade no later than the fifth/second (if College of Pharmacy module course) class day after the final grade for the course was assigned/posted. If the student is still convinced that the grade is an unfair evaluation of the student's performance in the course, the student may appeal the grade. The appeal must be made in writing within two class days. A response will be provided to the student within two class days. If the matter has not been resolved by the department chair to the student's satisfaction, the student must appeal within two days to the dean of the college in which the course is offered. Upon receipt of the written appeal, the dean will inform the Grade Appeals Committee that a grade appeal procedure has been initiated.

The faculty member has the sole responsibility to determine the final grade for the course. The department chairperson, dean or the Grade Appeals Committee may only make recommendations to the faculty member.

The complete policy statement on the Grade Appeals Procedure can be found in the Student Handbook.

This policy does not apply in the College of Law.

The University Course Numbering System

Each course is identified by a two, three or four letter subject code and a four-digit course number. Some music courses also include an alpha character to designate instrument. This information is used on all official records.

Eligibility for Intercollegiate Athletics

Ohio Northern is a member of the National Collegiate Athletic Association and the Ohio Athletic Conference. Ohio Northern follows the Constitution and Bylaws of the NCAA and OAC in determining the eligibility of students to participate in intercollegiate athletics unless the student is restricted from doing so by the action of the dean of his/her college for academic reasons or by the vice president for student affairs or the director of athletics for disciplinary reasons.

General Academic Regulations

Mid-term examinations are held at the discretion of the faculty member. In the College of Arts & Sciences such examinations must be during the seventh or eighth week of the semester and must be announced by the first day of the semester.

Each student is required to carry at least 12 credit hours per semester to establish one semester of full-time residence work. A student enrolled for less than 12 hours is classified as a part-time student.

Any required course in which a grade of "F" is earned should be taken again in the first semester in which the course is given after the failure occurs.

Transient Credit and Status

University policy strongly encourages students obtain prior approval by their academic dean for course work attempted at another institution and request that an official transcript of such course work promptly be sent directly from the issuing institution to the Office of the Registrar following completion of the course work.

Credits may be transferred only for courses graded C (2.00) or higher and must apply toward a degree in the course of study the student pursues.

Students who wish to pursue course work at another institution during a summer term or concurrently while enrolled in the University should consult with their advisor and submit a transient request to the academic dean. In order for the dean to evaluate the request, a catalog description of course(s) must accompany the request. Upon approval by the dean, the student and the Office of the Registrar will receive a copy of the completed form to verify approval. Failure to obtain prior approval can result in non-acceptance of credits by transfer to Ohio Northern University.

Students wishing to pursue courses at another institution during a regular term should consult with their advisor and obtain approval by the academic dean for transient status by the end of the last term enrolled. Such status may not be for a period of more than one academic year. Students who do not pursue a previously approved program or who do not return for the term listed on the transient application will be expected to seek readmission as a transfer student.

Transient status requests must be accompanied by a list of approved courses and name and address of the institution to be attended. This list must include course equivalencies and credits to be awarded.

Students permitted to complete their last requirements for graduation off-campus must apply for a terminal transient status. If the terminal transient status is approved, students must contact the Office of the Registrar concerning graduation. It is understood that terminal transient status is granted only under extraordinary circumstances or as part of a 3+2 degree program.

Students who are not enrolled at Ohio Northern University for one or more regular terms are expected to apply for readmission by the application deadline date. Those who have been enrolled at another institution without a prior approval during a regular term will be considered for admission as transfer students.

These procedures will apply to all colleges in the University.

Credit by Special Institutional or Required Placement Examination

Examinations are employed both to provide assistance in placing students at the appropriate level in certain areas of study and to provide an opportunity for students to obtain credit for previously learned skills.

In certain subject areas, students are required to take a placement examination. There is no charge to take that examination or for placement. The student who is seeking a degree at ONU can use the test results of those examinations to obtain credit. In that case, the student is required to pay an administrative or credit fee. For one course (up to five credits), only an administrative fee is charged; there is no credit fee. For all subsequent courses, there is a per credit hour fee charged (the administrative fee is included in the credit charge).

In certain subject areas, a full-time undergraduate student who is seeking a degree at ONU can request a Special Examination for Credit. There is an administrative fee charged which must be paid **before** the examination can be taken. The student may wish to use the test results of those examinations to obtain credit. In that case, the student may be required to pay an additional credit fee. For one course (up to five credits), there is no credit fee. For all subsequent courses, there is a per credit fee charged (the administrative fee is included in the credit charge).

The examination is evaluated as either "S" (satisfactory) or "U" (unsatisfactory). Only satisfactory evaluations are recorded on the student record. Results of examinations do not affect the student's cumulative grade point average. Satisfactory examination results will be recorded as either "PL" or "XM." "PL" indicates the examination satisfies the appropriate graduation and/or prerequisite requirements of the course(s) with no hours earned towards graduation. "XM" indicates that credit hours are earned for the specified course(s).

Permission for a special examination requires formal application using a form obtained from the Office of the Registrar. The application must be approved by (1) the student's academic advisor; (2) the academic dean of the student's college of registration, and (3) the chair of the department in which the course is offered. Such examination shall not be approved for courses which the student has previously audited, completed or failed at this or another institution nor for courses which are prerequisite to any course for which the student has earned credit nor for courses for which the student has previously attempted credit by examination unsuccessfully.

After all required approvals have been obtained, in the order required on the form, and appropriate fees paid, an examiner is assigned by the

department chair. The student shall arrange for the examination with the examiner. The examination must be approved, given, evaluated, and the results reported to the Office of the Registrar prior to the end of the "W" period of the semester in which the examination is administered.

Payment of an "administration fee" is required in the controller's office prior to taking a special examination. The "credit hour fee" is 50% of the tuition charge per credit hour as charged to part-time students as listed in the university catalog at the time of the payment of the fee. The "administration fee" is applied toward the "credit hour fee." One course, maximum of five hours, is not assessed the "credit hour fee."

Credit earned by examination after having achieved senior (SR) or P6 status is not applicable toward graduation. A maximum total of thirty (30) hours of credit earned by special examination, externally administered or ONU special examination, can be recorded and applied toward a baccalaureate degree.

Modern Languages Retroactive Credit Policy

All students are eligible for retroactive credits for all Modern Languages courses below the level of the first course satisfactorily completed at ONU. (See chart on page 109). To determine entry into the appropriate course level, students may complete a placement test and consult with faculty in the Modern Languages Department. The department strongly recommends that students begin foreign language study during their first year.

Student Responsibility

Faculty members, academic advisors and deans are available to help students understand and meet academic requirements for a degree, but students themselves are responsible for meeting them. Degrees are not conferred until all requirements are fulfilled. Thus it is essential that students be familiar with requirements and confer frequently with their advisors.

Participation in Student Outcomes Assessment

Ohio Northern regularly conducts campus-based studies of student attitudes, student achievement, student satisfaction, and personal, professional and career development. These studies are grouped under the heading of student outcomes assessment and are conducted by the Office of Institutional Research, individual colleges, and academic programs. Data collection and analysis procedures employed ensure the confidentiality and privacy of individual participants and results are only provided in aggregate form. Participation in student outcome assessment assists Ohio Northern University in the continuous improvement of academic programming and student development.

Awarding of Degrees

A student receives the appropriate degree after applying for graduation and completing the required curriculum as outlined in the five colleges of the University.

Graduation requirements, including but not limited to: general education, secondary academic program, minor(s), concentration(s), and option(s), are specified in the university catalog issued in the academic year of the student's most recent admission or readmission as a degree seeking student. When a student changes colleges at ONU the new college will determine the catalog to be in effect for the student.

A student can complete a secondary academic program and/or minor(s) and/or concentrations and/or option(s) added to the University's curriculum in catalogs subsequent to his/her admission as a degree seeking student.

A student can make an irrevocable request in writing to change the catalog used to determine his/her graduation requirements to a more current catalog. Such a change requires the approval of the student's academic department and college dean.

In order to qualify for graduation, an undergraduate student is required to submit a formal application for graduation to the Office of the Registrar. Applications for graduation should be submitted two semesters in advance of the anticipated term of graduation but must be submitted before the completion of the advance registration period for the semester of planned graduation.

A student is required to have a minimum of a 2.00 cumulative average in addition to meeting other requirements before qualifying for the appropriate degree.

Commencement is held once a year at the conclusion of spring semester in separate ceremonies. Spring semester graduates must participate in commencement. All participants must be approved to participate and wear the traditional cap and gown. Graduates from the previous summer and fall terms are invited to participate in the spring commencement and must notify the Office of the Registrar at least one month in advance of their plan to participate in the commencement. The University confers degrees at the end of the semester after completion by the student of all graduation requirements.

In order to be eligible for a degree from Ohio Northern University, a student must register for and successfully complete at least 25% of the course requirements for that degree at Ohio Northern University. The last 30 semester hours for the degree must be completed at Ohio Northern University (ONU on-line courses, co-ops, internships, etc. are included). To complete a major, minor, or option for a degree from Ohio Northern University, a student must complete at least 25% of the course requirements for the major, minor, or option at Ohio Northern University.

To receive a degree a student must meet all requirements which the faculty of the college may determine and receive the approval of the University faculty for the awarding of the degree. Substitutions in college requirements for graduation may be approved by the appropriate academic department or college dean's office.

Secondary academic program majors, minors, concentrations and options for which the student has applied and for which he or she is eligible are awarded at the time of awarding of the degree.

Graduation with Distinction

The University recognizes, confers at graduation, and records on the diploma three classes of senior honors: *cum laude*, awarded to undergraduate, MPPA, and pharmacy students with a cumulative grade point average of at least 3.5; *magna cum laude*, awarded to students with a cumulative point average of at least 3.7; and *summa cum laude*, awarded to students with an accumulated grade point average of at least 3.9. A student must complete at least 30 hours of graded courses at Ohio Northern to qualify for graduation with distinction. This policy does not apply to the College of Law.

Transcripts of Academic Record

The University offers online transcript ordering through the National Student Clearinghouse (NSC), a non-profit organization serving the higher education community. Requests may be made to NSC via Self-Service Banner. Two to five working days should be allowed for processing transcript requests. Special handling will be granted upon request, at the registrar's office, with prepayment of the appropriate fee.

Ohio Northern University has published regulations designed to protect the privacy of students by the University. Copies of the University policy may be obtained from the offices of the University registrar and the dean of student services or on the Web at www.onu.edu/registrar

Graduate Placement

The University assists its graduates with identifying career opportunities and helping them develop professional networking materials and skills. These services are available to seniors and alumni and are free-of-charge.

Seniors planning to continue their education are advised to research their potential graduate programs to ascertain the graduate entrance examination required. Several of these exams are administered on campus.

Summer Session

The summer session includes courses for regular college students, academically talented high school students who have completed their junior year, and adults who may wish to study for professional advancement or cultural enjoyment.

Degree/Enrollment Verification

Any transfer work needed to complete requirements for graduation at the end of either fall or spring semesters must be received by the Office of the Registrar before the beginning of the next term. For graduation at the end of the summer session, records of transfer work must be received by the Office of the Registrar by the Friday of the last week of classes in the summer term.

The National Student Clearinghouse is Ohio Northern University's authorized agent for providing degree verifications for graduates and enrollment verification for current students. Ohio Northern University submits data electronically to the National Student Clearinghouse (NSC), and in compliance with FERPA, the Clearinghouse dispenses the information electronically to lending institutions, background investigation firms, prospective employers, and credit granting agencies.

Ohio Northern University reports enrollment and expected graduation dates to the NSC every 30 days, and awarded degrees are reported after each semester. Students are strongly encouraged to contact their lenders and/or insurance agents to determine continued eligibility before dropping/withdrawing from classes and decreasing their enrollment status to below full-time.

University Academic Programs

ENGLISH LANGUAGE PROGRAMS

W. Trudeau (*Exec. Dir./Dept. Head*), M. Pitts (*Dir. International Scholar Transition Program*), N. Mills (*Dir. Intensive English Program*), A. Smith, (*Instructor ELP*), J. Smith (*Instructor ELP*). Website: www.onu.edu/elp

Mission and Overview:

The mission of English Language Programs (ELP) at Ohio Northern University is to meet the specific, though varied, needs of students, instructional staff and university in English language teaching and learning. ELP grounds itself in the current best practices in the field in order to achieve its overall mission and serve as a resource and language advocate to the larger community.

For students and the university: The focus of ELP is language proficiency for successful academic study at a high quality, American university with U.S. and international faculty. ELP equips students with English abilities commensurate with the language demands of the classrooms within the policies and governance structures of ONU. Comprising of two separate but interrelated programs, the International Scholar Transition Program (ISTP) and the Intensive English Program (IEP), ELP is designed to build a strong foundation in English, and prepare learners for and transition them into academic settings. ELP employs instructional staff with terminal degrees in language teaching whose expertise is available to students and the university at large.

For instructional staff: ELP provides a carefully designed and assessed curriculum for language learning that provides students with a solid learning environment and instructors with opportunity to explore a variety of teaching modalities to support learning objectives. A supportive environment is provided for instruction, classroom-based research, and best practices in teaching and learning.

For the larger community: ELP represents the English language teaching profession and is a point of contact within the university for non-academic English learners. While it is not the mission of ELP to directly provide programs outside academic English, the program directs these learners to the appropriate resources.

INTENSIVE ENGLISH PROGRAM

The Intensive English Program provides academic English literacy skills to students whose TOEFL iBT score is less than 50 or whose language assessment subscores indicate deficiencies preventing success in the ISTP Program. IEP students may be conditionally admitted to a degree program and will gain full admission to that program after successfully meeting the program's standards for English competency or successfully entering the ISTP Program following the IEP. Students may also be admitted to the IEP as Special Admissions without conditional admission to a university degree program.

Students beginning the five-level Intensive English Program study at least one year, including a summer term, before moving on to ISTP. At level one should expect to study in the IEP. Students entering at higher

than the first level may complete in less time. Level and courses are decided after students complete an English placement test during International Student orientation immediately prior to the term. Once enrolled, progress through the IEP depends on successful completion (grade of C+ or better) of each level before advancing to work at a higher level. Progress is from level to level; students may not take courses outside their level and IEP students may not enroll in academic courses outside the IEP.

Sometimes a single course has students at different levels with special content to meet student language abilities. Content-Based instruction and Integrated Skills courses may include students from different levels; each student learning material at his or her level related to his or her major. Some courses have specific prerequisites; for all levels, successful completion of a lower level (C+ average or better) is required to enroll in courses at a higher level.

Subject - English for Academic Purposes (EAP) courses

EAP 0111 - L1 Listening/L1 Speaking

2 Credits

Beginning level students are introduced to simple language and essential contexts in which they are equipped with the basic information necessary to survive in the English speaking culture of America. The students not only learn vocabulary and stock phrases, but they participate in contexts where language is necessary. Students gain confidence with the English language as they are encouraged to interact in the English speaking culture. Students must achieve the qualifying score on the IEP Placement Exam.

EAP 0131 - L1 Reading

2 Credits

Beginning-level students are introduced to simple language and essential contexts in which they are equipped with the basic information necessary for them to survive in the English reading culture of America. The students not only learn vocabulary and stock phrases, but they additionally participate in contexts where written language is necessary, such as classroom instruction. Additionally, introduction to interpretation of schedules, charts and graphs will be instructed. By the end of the term, students gain confidence with the English language by developing their foundational reading strategies and survival vocabulary. Students must achieve the qualifying score on the IEP Placement Exam.

EAP 0141 - L1 Writing

2 Credits

This beginner-level course emphasizes fundamental writing skills including application of alphabet, spelling, and simple sentence structure. Knowledge of compound sentences will be introduced as well as introduction to punctuation. Students must achieve the qualifying score on the IEP Placement Exam.

EAP 0151 - L1 Grammar

2 Credits

This beginner grammar course enhances a student's grammatical knowledge of the simple present, BE-verb, parts of speech, subject/object pronouns, article forms, and modals of ability. Students will identify the form of simple past, present progressive, future verbs, and quantity expressions. Generalizations and measurement words will be introduced. This course parallels to other skill areas of the same level to promote communicative usage of grammar. Students must achieve the qualifying score on the IEP Placement Exam.

EAP 0161 - Entry Orientation

2 Credits

This course is for students new to Ohio Northern University. It focuses on creative and practical English necessary for survival in this English language university setting. Learners also focus on life-skill themes and the language skills required to improve confidence, and interact successfully. They learn creative dialogues necessary for restaurants, doctor's offices, hair salons and the like. Students take this course at their entry level, with outcomes appropriate to language skills.

EAP 0191 - L1 Special Topics

1 to 2 Credits

From time to time, special topics in English will be added to the schedule: pronunciation, orthography, spelling or content-based language instruction. Special topics may be added to the term curriculum and required of all students at Level 1, or may be substituted for another course at Level 1. Must be enrolled in one of the following Departments: Intensive English Program. This course may be repeated 4 times.

EAP 0211 - L2 Listening*2 Credits*

This high-beginning course requires proficiency in discriminating sounds within words and words within phrases. Students master understanding and responding to simple questions, directions and classroom instructions. They are introduced to stress, rhythm and intonation as markers of meaning by listening to common dialogues in university and social contexts, and learn to identify main ideas and details. Prerequisite(s): EAP 0111 Minimum Grade of C.

EAP 0221 - L2 Speaking*2 Credits*

This high-beginning speaking course requires proficiency in basic sounds structures and sound/letter correspondences, cardinal and ordinal enumerating and stock phrases for greetings and leavings, basic campus encounters such as library, registration and asking for clarification. Students will review campus interchanges such as buying books and asking about time and questions in university and social contexts. The basics of public speaking will be introduced, as will communicating main ideas, expressing opinions and giving directions. Students will practice intonation patterns and rhythm and blending in speech. Students must have met the qualifying score on the ESL Placement Exam or must have satisfied the pre-requisite listed. Prerequisite(s): EAP 0111 Minimum Grade of C.

EAP 0231 - L2 Reading*2 Credits*

This high-beginner level course requires students to be able to read basic classroom instructions, common stock phrases, and read basic charts and schedules. Students will be introduced to reading strategies such as, skimming and scanning, and to different language-learning resources. Students are expected to read extensively. Student will participate in regular timed-readings. By the end of the term, students will be able to increase reading speed and understand and recognize expanded vocabulary. Prerequisite(s): EAP 0131 Minimum Grade of C.

EAP 0241 - L2 Writing*2 Credits*

This high beginner level course requires students to compose simple sentences and basic survival writing tasks. Students will be introduced to the writing process as well as organize basic information into paragraphs. Students are expected to connect ideas in writing to create cohesion while mastering simple, compound and complex sentence structures. Students will participate in regular timed-writings and practice revision and editing strategies. By the end of the term, students will be able to apply basic formatting to paragraphs. Submission of a one-typed paragraph and one-hand written paragraph is expected for the student file. Prerequisite(s): EAP 0141 Minimum Grade of C.

EAP 0251 - L2 Grammar*2 Credits*

This high-beginner grammar course requires proficiency in the simple present, BE-verb, parts of speech, subject/object pronouns, article forms, and modals of ability. This course enhances a student's grammatical knowledge of verb tense, modals and simple sentence structure. Simple past, present progressive and future verbs will be introduced, as well as IF-clauses for the future, compound sentences, quantity expressions, possessives and imperatives. This course parallels to other skill areas of the same level to promote communicative usage of grammar. Prerequisite(s): EAP 0151 Minimum Grade of C.

EAP 0291 - L2 Special Topics*1 to 2 Credits*

From time to time, special topics in English will be added to the schedule: pronunciation, orthography, spelling or content-based language instruction. Special topics may be added to the term curriculum and required of all students at Level 2, or may be substituted for another course at Level 2. Must be enrolled in one of the following Departments: Intensive English Program. This course may be repeated 4 times. This course is repeatable for a total of 8 hours.

EAP 0311 - L3 Listening*2 Credits*

This low-intermediate course requires proficiency in understanding and responding to simple questions, directions and classroom instructions. Students master basic suffix pronunciation, such as -s and -ed endings and expand the ability to distinguish main ideas and details from lectures as well as knowledge of stress, rhythm and intonation patterns. Students are introduced to discriminating between formal and informal language use, making predictions and inferring intent in listening. Prerequisite(s): EAP 0211 Minimum Grade of C.

EAP 0321 - L3 Speaking*2 Credits*

This low-intermediate course requires proficiency in basic campus interchanges and interacting in university and social contexts. The course will expand the students' ability to interact in social and academic settings, including class presentations using visual aids. Students will practice signaling main ideas in a presentation, main supporting ideas, and summarizing and telling about an experience. Students will be introduced to classroom discussion models and will practice discussion strategies in class. They will master production of plural and past endings of nouns and verbs. Prerequisite(s): EAP 0221 Minimum Grade of C.

EAP 0331 - L3 Reading*2 Credits*

This low-intermediate level course requires students to be able to skim and scan reading text for main ideas and targeted information. Students will be introduced to varying rhetorical styles and vocabulary skills needed to infer meaning of confusing words. Introduction to appropriate text selection will be instructed. Students are expected to apply reading strategies to intensive and extensive reading. Students will participate in regular timed-readings. By the end of the term, students will be able to increase reading speed and apply vocabulary. Prerequisite(s): EAP 0231 Minimum Grade of C.

EAP 0341 - L3 Writing*2 Credits*

This low-intermediate level course requires students to be able to organize information into paragraphs while practicing the steps of the writing process. Students completing this course will examine and compose four varying rhetoric styles. Students will participate in regular timed-writings. This course will focus on revision and editing strategies and fluency in writing. Students will master paragraph writing and will submit a one-typed paragraph and one-hand written paragraph for the student file. Prerequisite(s): EAP 0241 Minimum Grade of C.

EAP 0351 - L3 Grammar*2 Credits*

This low-intermediate level course requires students to have proficiency in simple past, modals of advice, request and permission, parts of speech with respect to adverbs and adjectives, and coordinating conjunctions in compound sentences. This course enhances a student's grammatical knowledge of the differences between similar verb forms, modals, compound sentences, and articles. Transitivity of phrasal verbs, gerunds and infinitives, present perfect and irregular past participles will be introduced as well as the comparative and superlative structures. This course parallels to other skill areas of the same level to promote communicative usage of grammar. Prerequisite(s): EAP 0251 Minimum Grade of C.

EAP 0361 - American Culture*2 Credits*

This course focuses on developing one's understanding of American culture and increases awareness of ones identity within American Culture. Readings about distinct aspects of American Culture will be included and enhanced by group discussions. Weekly labs require students to do field work in observing local culture from a firsthand perspective. The culminating project is a student for instructors and staff in which the students compare American culture with their home culture.

EAP 0391 - L3 Special Topics*1 to 2 Credits*

From time to time, special topics in English will be added to the schedule: pronunciation, orthography, spelling or content-based language instruction. Special topics may be added to the term curriculum and required of all students at Level 3, or may be substituted for another course at Level 3. Must be enrolled in one of the following Departments: Intensive English Program. This course may be repeated 4 times. This course is repeatable for a total of 8 hours.

EAP 0411 - L4 Listening*2 Credits*

This intermediate course requires proficiency in distinguishing main ideas and details from lectures, recognizing the organization of short academic lectures, and pronunciation of basic suffixes. Students will master distinguishing main from supporting ideas in lectures, recognizing organization markers for important ideas, and are introduced to presentation and small group discussion participation. Students learn to access body language and speaker's intent. Students also practice outlining, using common symbols to facilitate note-taking and learn to distinguish fact from opinion. Prerequisite(s): EAP 0311 Minimum Grade of C.

EAP 0421 - L4 Speaking*2 Credits*

This intermediate course requires proficiency in basic communications, communicating main and supporting ideas in formal presentations, and summarizing experiences. Students review presentation methodologies and develop the ability to make longer and more extensive presentations, with supporting visuals and handouts. They review discussion formats while developing the ability to give feedback and reach consensus on an issue. Students are introduced to interviewing and reporting techniques and enhance their ability to use stress to signal focus words, important phrases and distinguish homonyms with different stress patterns. Prerequisite(s): EAP 0321 Minimum Grade of C.

EAP 0431 - L4 Reading*2 Credits*

This intermediate level course requires students not only to skim and scan reading text for main ideas and details, but also for development, purpose, and important ideas. Students are introduced to different academic rhetorical styles as well as expand vocabulary using learned skills. Mastery of dictionary and thesaurus are stressed in this level. Students are expected to apply reading strategies to intensive and extensive reading and will participate in regular timed-readings. By the end of the term, students will be able to increase reading speed and apply vocabulary learned by way of study of stems and affixes. Prerequisite(s): EAP 0331 Minimum Grade of C.

EAP 0441 - L4 Writing*2 Credits*

This intermediate level course requires students to compose a paragraph and demonstrate a fluency in writing. This course will introduce students to three body paragraph essay writing by exposing students to varying model essays. Students apply writing techniques, practice revision and editing strategies, and apply formatting to essays. Students are introduced to research practice and methods to identify reliable sources. Students participate in regular timed-writings and students completing the term will submit a one typed 3-body paragraphs essay and one hand-written 3-body paragraphs essay for the student file. Prerequisite(s): EAP 0341 Minimum Grade of C.

EAP 0451 - L4 Grammar*2 Credits*

This intermediate level course requires students to have proficiency in simple and compound sentences, past participles, present perfect, modals of desire and preference, and transitive and intransitive phrasal verbs. This course enhances a student's grammatical knowledge of phrasal verbs, modals, gerunds and infinitives. Passive voice, adjective and adverb clauses in complex sentences and past perfect will be introduced. This course parallels to other skill areas of the same level to promote communicative usage of grammar. Prerequisite(s): EAP 0351 Minimum Grade of C.

EAP 0461 - Testing Strategies*2 Credits*

This course provides practice in the type of exercises encountered on the TOEFL, IELTS, MELICET and similar language assessment tests. Test strategies, useful not only for the proficiency test but also for success in academic courses, are also taught. Students become familiar with common topics covered on the tests. Practice test portions and entire practice tests are administered and progress recorded.

EAP 0471 - L4 Content-based Instruction*2 Credits*

This intermediate level course integrates the learning of language skills with the mastery of academic content in a specific area of study. Students use the study of academic, often core content or major area of study, to increase vocabulary, knowledge of language use in classroom settings, and interactive language skills. Language skill enhancement occurs through note-taking, dialogue, presentation skills, test-taking and the writing of academic papers. At Level 4, the coursework must be applicable or adaptable to the language skills.

EAP 0481 - L4 Integrated Skills*2 Credits*

This intermediate level course requires students to be able to utilize all language skills: reading, writing, listening, and speaking, within a single setting and theme. Students are expected to utilize knowledge of grammar to edit and revise written work and learn strategies to continue language development through academic classes. Students are expected to work with authentic materials such as articles, podcasts, newscasts, documentaries or interviews. By the end of the term, students will be able to give thoughtful responses in writing and through discussion or presentation to the ideas presented in the authentic materials.

EAP 0491 - L4 Special Topics*1 to 2 Credits*

From time to time, special topics in English will be added to the schedule: pronunciation, orthography, spelling or content-based language instruction. Special topics may be added to the term curriculum and required of all students at Level 4, or may be substituted for another course at Level 4. Must be enrolled in one of the following Departments: Intensive English Program. This course may be repeated 4 times. This course is repeatable for a total of 8 hours.

EAP 0511 - L5 Listening*2 Credits*

This high intermediate course requires proficiency in distinguishing main from supporting ideas in lectures, and in recognizing organization markers for important ideas. Students develop the ability to understand and outline short academic lectures, distinguish topics, subtopics and supporting structures, and gain mastery of non-verbal and pronunciation/intonation markers that signal important information. They learn to evaluate peer presentations and discussions and are introduced to debating. Prerequisite(s): EAP 0411 Minimum Grade of C.

EAP 0521 - L5 Speaking*2 Credits*

This high-intermediate course helps students improve fluency in spoken English. It requires proficiency in presentation and discussion skills and in communicating important and supporting ideas. Students practice longer presentations and interviews and develop feedback models both for self-evaluation and for evaluation of others' presentations. They are introduced to debate models and practice debating in class, with focus on expressing disagreement and supporting claims. Prerequisite(s): EAP 0421 Minimum Grade of C.

EAP 0531 - L5 Reading*2 Credits*

This high intermediate class requires students to apply learned reading and vocabulary strategies for further academic preparation and readiness. Students are introduced to academic journals and online scholarly publications. Additionally, students will be introduced to understanding author's tone and purpose. Students participate in regular times readings with comprehension questions. By the end of the term, students demonstrate a mastery of reading skills and familiarity with academic genres. Prerequisite(s): EAP 0431 Minimum Grade of C.

EAP 0541 - L5 Writing*2 Credits*

This high intermediate level course requires students to compose a three body paragraphs essay and demonstrate a fluency in writing. Students connect ideas in writing while applying steps of the writing process, editing strategies, and basic formatting to essays. Students are introduced to a five body paragraphs writing with a mastery of introduction, body and concluding paragraphs. Students incorporate research practices into four varying rhetoric styles. Students completing this term participate in regular timed writings and submit one typed five body paragraphs essay and one hand written five body essay for inclusion in the student file. Prerequisite(s): EAP 0441 Minimum Grade of C.

EAP 0551 - L5 Grammar

2 Credits

This high intermediate level course requires students to have proficiency in present and past perfect tenses, of active and passive voices, of modals of logic, conclusion, suggestion and lack of necessity, of gerunds and infinitives, and complex sentences. This course enhances students' grammatical knowledge of noun clauses in complex sentence, gerunds, infinitives and phrasal verbs. Perfect progressive, future perfect and IF-conditionals are introduced. This course parallels to other skill areas of the same level to promote communicative usage of grammar. Prerequisite(s): EAP 0451 Minimum Grade of C.

EAP 0571 - L5 Content-based Instruction

2 Credits

This high intermediate level course integrates the learning of language skills with the mastery of academic content in a specific area of study. Students use the study of an academic, often core content or major area of study to increase vocabulary, knowledge of language use in classroom settings, and interactive language skills. Language skill enhancement occurs through note-taking, dialogue, presentation skills, test-taking and the writing of academic papers. At Level 5, the coursework must be applicable or adaptable to the language skills outlined in the skill-based courses at this level. Topics or content area taught will vary each time the course is offered. At Level 5, the course is frequently taught using a content area instructor with support from an IEP instructor.

EAP 0581 - L5 Integrated Skills

2 Credits

This high-intermediate level course requires students to utilize all language skills: reading, writing, listening, and speaking within a single setting and theme. Students are expected to utilize knowledge of grammar to edit and revise written work and to learn strategies to continue language development through academic classes. Students are expected to work with authentic materials such as articles, podcasts, newscasts, documentaries or interviews. By the end of the term, students will give thoughtful responses in writing and through discussion or presentation to the ideas presented in the authentic materials.

EAP 0611 - L6 Listening and Speaking

4 Credits

This gateway course is for completers of the Intensive English Program who need additional course-work before entering academic studies at the beginning of the following semester. This is a project-based course in which students practice, refine, and improve skills in listening and speaking. Competent completers of this course may advance directly to the second semester of Bridging Reading and Vocabulary, based on successful completion of Level 6 and TOEFL ITP reading sub-scores above 50. The project theme varies, but focus is on one or more specific projects utilizing extensive and intensive listening and speaking skills. Prerequisite(s): EAP 0511 Minimum Grade of C or EAP 0521 Minimum Grade of C. Corequisite(s): EAP 0631, EAP 0651.

EAP 0631 - L6 Reading and Writing

4 Credits

This gateway course is for completers of the Intensive English Program who need additional course-work before entering academic studies at the beginning of the following semester. This is a project-based course in which students practice, refine, and improve skills in English reading and writing. Competent completers of this course may advance directly to the second semester of Bridging Reading and Vocabulary, based on successful completion of Level 6 and TOEFL ITP reading sub-scores above 50. The project theme varies, but focus is on one or more specific projects utilizing extensive and intensive reading and writing skills. Prerequisite(s): EAP 0531 Minimum Grade of C or EAP 0541 Minimum Grade of C. Corequisite(s): EAP 0611, EAP 0651.

EAP 0651 - L6 Grammar

1 Credit Grading mode is S/U

This grammar workshop offers support for students' projects in Level 6 project-based coursework. Students focus on identifying knowledge gaps in grammar and practice self-editing skills in production of written and spoken English. They also focus on the grammar of authentic texts that parallel their assignments. The course is offered for groups of up to eight students. Prerequisite(s): EAP 0551 Minimum Grade of C. Corequisite(s): EAP 0611, EAP 0631.

INTERNATIONAL SCHOLAR TRANSITION PROGRAM (ISTP)

The International Scholar Transition Program provides International students holding a TOEFL score of 50-78 iBT with solid foundation in academic English and American academic culture through concurrent enrollment in general education and composition courses. The Transition Program facilitates advancement of academic English skills for study in students' respective majors. All courses carry academic credit and fulfill degree requirements or elective credits towards graduation.

Applicants with iBT scores in this range are admitted to the International Scholar Transition Program for full time study over one or two semesters. Non-ISTP courses are chosen in consultation with advisors in the student's major.

Students who remain in the ISTP for a full academic year, earning 2.0 or better in all ISTP and academic courses, and demonstrating English proficiency with an Institutional TOEFL (ITP) score greater than 500 (no subscores below 50) are eligible for full time degree study. The ISTP must be completed before registration in courses numbered 3000 or greater.

Earlier graduation from the Program requires meeting the admission standards for English proficiency (79 on the iBT with matching subscores; 6.0 on the IELTS with no subscore below 5.5).

Students meeting English proficiency levels while enrolled in the Transition Program must complete ISTP courses with a 2.0 or better entering full time regular degree study the following semester. Students receiving less than 2.0 in any ISTP course must repeat that course with a passing score.

Subject - International Scholar Transition Program (ISTP)

ISTP 1111 - Listening & Speaking 1

6 Credits

This course develops listening and speaking skills for academic purposes for students with minimum TOEFL ITP Section 1 subscores of 46 or equivalent. Listening strategies to strengthen comprehension of academic lectures and introduction to effective note-taking. Additional focus on enhancing speaking skills, including pronunciation practice and role-play, as well as extensive individual and group presentation and class discussions. Concurrent registration in ENGL 1411, 1511, 1421, or 1521 is expected. Formerly known as BRDG 1201.

ISTP 1131 - Reading and Vocabulary 1

4 Credits

This course develops reading and vocabulary skills for academic purposes for students with minimum TOEFL ITP Section 3 subscores of 46 or equivalent. Students review and demonstrate ability to predict content, identify main and supporting ideas and details, and make inferences when reading academic texts. Students will also expand and apply academic vocabulary, while increasing reading speed and comprehension. Concurrent registration in ENGL 1411, 1511, 1421, or 1521, is expected. Formerly known as BRDG 1101.

ISTP 1191 - Special Topics

3 to 6 Credits

From time to time, special topics in English will be added to the schedule. Special Topics may be added to the term curriculum and required of all students or may be substituted for another course. This course may be repeated 4 times. This course is repeatable for a total of 12 hours.

ISTP 1211 - Listening and Speaking 2

6 Credits

This course develops advanced listening and speaking skills for academic purposes for students with minimum TOEFL ITP Section 1 subscores of 50 or equivalent. Further development of listening strategies to optimize comprehension of complex academic lectures and discussion, as well as more sophisticated note-taking are included. Additional focus on enhancing speaking skills, including pronunciation practice and role-play, in-depth class discussion, as well as extensive individual and group presentation. Concurrent registration in ENGL 1411, 1511, 1421, or 1521 is expected. Formerly known as BRDG 1221. Students must have taken one of the prerequisite courses or have permission of the ISTP Director. Prerequisite(s): BRDG 1201 Minimum Grade of C or ISTP 1111 Minimum Grade of C.

ISTP 1231 - Reading and Vocabulary 2

4 Credits

This course develops advanced reading and vocabulary skills for academic purposes for students with minimum TOEFL ITP Section 3 subscores of 50 or equivalent. Students focus on critical thinking skills, inferences, interpretation, evaluation, synthesis analysis and application as well as additional emphasis on academic vocabulary development to maximize comprehension. Students will read authentic academic texts, articles, essays and novels. Concurrent registration in ENGL 1411, 1511, 1421, or 1521 is expected. Formerly known as BRDG 1111. Students must have taken one of the prerequisite courses or have permission of the ISTP Director. Prerequisite(s): BRDG 1101 or ISTP 1131.

COLLEGE COMPOSITION PROGRAM

The Department of English provides instruction for international students in the area of college composition. Two series of courses (ENGL 1411 & 1421; ENGL 1511 & 1521) are available for international students, each of which meets the writing requirement of the Writing Seminar, ENGL 1221. The two series have been designed to meet the needs of second language English learners, while still addressing the development of college composition skills. A description of these courses is located in the College of Arts & Sciences section of the catalog, under the Department of English.

By university policy, all students whose first language is not English, including non-ISTP students, enroll in the College Composition courses.

UNIVERSITY COURSES

Subject - General Education course

EXDS 2001 - Extra-disciplinary Seminar

3 Credits

This course expands a student's experience beyond the major by exploring a common theme from other perspectives. Each instructor will develop a unique course that reflects the common theme. This course is a requirement of the university general education program, and is intended to be completed in the sophomore or junior year. Students must take a section offered by a faculty member outside their college. In the case of students in the College of Arts and Sciences, they must enroll in a section offered outside their division. May not be enrolled in one of the following Classifications: Freshman.

Subject - Varsity Sports (VARS)

VARS 1001 - Cross Country (Men) - Varsity

1 Credit Grading mode is S/U

Offered fall semester. This course may be repeated 4 times.

VARS 1011 - Cross Country (Women) - Varsity

1 Credit Grading mode is S/U

Offered fall semester. This course may be repeated 4 times.

VARS 1021 - Football - Varsity

1 Credit Grading mode is S/U

Offered fall semester. This course may be repeated 4 times.

VARS 1031 - Soccer (Men) - Varsity

1 Credit Grading mode is S/U

Offered fall semester. This course may be repeated 4 times.

VARS 1041 - Soccer (Women) - Varsity

1 Credit Grading mode is S/U

Offered fall semester. This course may be repeated 4 times.

VARS 1051 - Volleyball - Varsity

1 Credit Grading mode is S/U

Offered fall semester. This course may be repeated 4 times.

VARS 2001 - Basketball (Men) - Varsity

0 or 1 Credits Grading mode is S/U

Offered fall and spring semesters. This course may be repeated 8 times.

VARS 2011 - Basketball (Women) - Varsity

0 to 1 Credits Grading mode is S/U

Offered fall and spring semesters. This course may be repeated 8 times.

VARS 2021 - Indoor Track (Men) - Varsity

0 to 1 Credits Grading mode is S/U

Offered fall and spring semesters. This course may be repeated 8 times.

VARS 2031 - Indoor Track (Women) - Varsity

0 or 1 Credits Grading mode is S/U

Offered fall and spring semesters. This course may be repeated 8 times.

VARS 2041 - Swimming & Diving (Men) - Varsity

0 or 1 Credits Grading mode is S/U

Offered fall and spring semesters. This course may be repeated 8 times.

VARS 2051 - Swimming & Diving (Women) - Varsity

0 or 1 Credits Grading mode is S/U

Offered fall and spring semesters. This course may be repeated 8 times.

VARS 2061 - Wrestling - Varsity

0 or 1 Credits Grading mode is S/U

Offered fall and spring semesters. This course may be repeated 8 times.

VARS 3001 - Baseball - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3011 - Golf (Men) - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3021 - Golf (Women) - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3031 - Outdoor Track (Men) - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3041 - Outdoor Track (Women) - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3051 - Softball - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3061 - Tennis (Men) - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3071 - Tennis (Women) - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3081 - Lacrosse (Men) - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

VARS 3091 - Lacrosse (Women) - Varsity

1 Credit Grading mode is S/U

Offered spring semester. This course may be repeated 4 times.

HONORS PROGRAM

Mission Statement The Ohio Northern University Honors Program, consistent with the University's Mission Statement, has been established to stimulate highly qualified students who are capable of meeting academic challenges and who choose to do so. Students are encouraged to develop their full intellectual potential within a continuing community of scholarly excellence that offers exciting and enhanced varieties of academic experiences.

Objectives Honors Program experiences are designed to nurture students' curiosity, their written and oral communication skills, and their leadership capabilities as well as to provide an opportunity for students to be more actively involved in their education.

Admission Upon acceptance at Ohio Northern, students with an ACT composite of 29 or higher (or equivalent SAT score) may apply to enter the Honors Program. Enrolled students who complete their first academic semester with a GPA of 3.50 or higher also may apply if space is available. Completion of the requirements of the Honors Program are the same regardless of time of entry.

An application to the Honors Program will include an essay that supports acceptance into the Program. Acceptance into the Honors Program is highly competitive.

Program Requirements The Honors Program consists of the Honors Program Orientation and three additional Honors Seminars (10 credit hours total); two Contract Courses done in conjunction with classes at the 3000-level or above (each class at least 3 credits); and a final Honors Capstone Enhancement. The Honors Seminars may be used to replace University General Education, college, major, or other requirements, as determined by University/department/college faculties.

To remain active in the Honors Program, students must have a cumulative GPA of 3.00 or better at the end of their second semester and a cumulative GPA of 3.20 or better at the end of their fourth semester at ONU. A student whose cumulative GPA is below 3.30 at the end of a sixth semester of enrollment will not be permitted to complete the Honors Program.

Students in the Honors Program are required to attend at least three Honors Capstone Enhancement public presentations each academic year.

Program Specifics Honors Seminars have an enrollment limit of 15. Students not in the Honors Program may enroll in an Honors Seminar on a space available basis upon approval of the instructor. However, only Honors Program students may enroll in the Honors Program Orientation. With the approval of the Honors Program Committee, an Honors Seminar requirement can be fulfilled by contract.

Honors Seminars and the Honors Capstone Enhancement are graded on the A-F scale.

As stated above, to satisfy the program requirements, two existing courses at the 3000-level or higher must be completed with contracts. Contracts do not provide more credit hours for a course, but rather represent agreement on the part of the student to complete work in greater depth. Contract proposals are initiated by the student with guidance from the instructor, and a copy of the final contract is placed on file for review by the Honors Program Committee no later than the third week of the term of enrollment. With the approval of the Honors Program Committee, Contract Course requirements may also be fulfilled following up on a research experience for undergraduates (REU), study abroad, internship, co-op, practicum or service experience.

The Honors Capstone Enhancement builds on the department/college capstone. A Capstone Enhancement plan must be approved by the department/college and the Honors Program Committee. Each student must give an announced, public presentation of the completed Honors Capstone Enhancement.

Program Recognition as an Honors Program graduate requires satisfactory completion of the program requirements stated above. At Commencement, the Honors student will be recognized as an ONU Honors Program graduate. Diplomas and transcripts will identify completion of the Honors Program.

Program Administration An Honors Program Committee with membership to include faculty from each of the undergraduate colleges and students in the Honors Program provides oversight to the Honors Program.

Subject - ONU Honors Program (HONR)

HONR 1001 - Honors Program Orientation

1 Credit Grading mode is S/U

Facilitates the transition from high school to honors-level work through in-depth explorations of the general education of major-related themes discussed in the various college-specific Transitions Experience classes.

HONR 1221 - Honors Writing Seminar

3 Credits

Introduction to college-level writing skills, including critical reading of challenging texts, advanced argumentation, researching and incorporating outside sources, and writing essays. Meets university first-year writing requirement. Course Attributes: Effective Communication Writing.

HONR 2001 - Honors Extradisciplinary Seminar

3 Credits

Topics include but are not limited to: Minds and Computers, Encountering the Other; Innovation, Creativity, and the Entrepreneurial Mindset. Meets university extra-disciplinary seminar requirement. Must be enrolled in one of the following Fields of Study: Honors Program. This course may be repeated 2 times.

HONR 2011 - Honors General Education Seminar

3 Credits

Topics include but are not limited to: Asian Studies, Corporate Culture, The Study of Human Language, Disease and Society, Energy Systems, Animatronics, Cryptography, and The Big Ideas in Physics. Will be tagged to meet a University General Education Outcome. This course may be repeated 2 times.

HONR 2021 - Honors Cultural Understanding Seminar

3 Credits

Topics include but are not limited to: Theories of Human Nature, Prophets in the Ancient Near East, and Sub-Saharan West African Cultures as Portrayed in Film. This course may be repeated 1 time. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction.

HONR 2041 - Honors Great Works Seminar

3 Credits

Reading and writing about significant works of literature. Topics include but are not limited to: Pushing the Boundaries-Exploration and Pioneering in the New World, The American Novel, Medieval Roots-Tolkien's Lord of the Rings, Film Adaptation, and Medicine in Literature. Course Attributes: Humanities, Effective Communication Writing, Informed Responses-Aesthetics.

HONR 2261 - Honors Nonverbal Communication Seminar

3 Credits

The multiple facets of communication that involve things other than actual words. How people communicate using the eyes, touch, the environment, time, space, color, smell and other nonverbal codes. Course Attributes: Communication Studies, Effective Communication Non-Writing.

HONR 2401 - Honors Professional Ethics Seminar

3 Credits

Major ethical theories and their application to professions and topics that arise in the professional setting. The role of institutions in ethical theory, the nature of professions, and responsibilities to clients and the public. Course Attributes: Humanities, Informed Ethical Responses.

HONR 3011 - Honors Advanced Seminar

3 Credits

Topics include but are not limited to: History of American Popular Culture, The Witch Hunt 1450-1700. This course may be repeated 1 time.

HONR 3801 - Honors Experiential Contract

0 Credits Grading mode is S/U

Work done under supervision of ONU Faculty following up on a research experience for undergraduates (REU), study abroad, internship, co-op, practicum, or service experience. This course may be repeated 1 time.

HONR 3991 - Honors Capstone Enhancement Research

1 to 3 Credits Grading mode is S/U

Research for the Honors Capstone Enhancement. This course may be repeated 1 time.

HONR 4001 - Honors Capstone Enhancement

1 Credit

Final version of the Honors Capstone Enhancement and oral presentation.

ROTC **(Reserve Officer Training Corps)**

AIR FORCE ROTC

The Air Force Reserve Officers Training Corps (AFROTC) program, offered by the Department of Aerospace Studies on the Bowling Green State University campuses, provides college-level education to prepare interested men and women for commissioning as second lieutenants in the United States Air Force. The program emphasizes the development of each student's sense of personal integrity, honor, individual responsibility and potential as a leader and manager.

The AFROTC program consists of a **General Military Course (GMC)** offered to freshmen and sophomores and a **Professional Officer Course (POC)** offered to selected juniors and seniors. Admission to the GMC is open to most U.S. citizens, male and female, over the age of 14. The student must be enrolled full-time in the university and registered for a minimum of 12 academic hours. The student spends one hour per week in AFROTC courses. Uniforms and AFROTC textbooks are provided without cost while the student is enrolled in the GMC. Enrollment of foreign students is governed by Air Force regulations.

Admission to the POC is on a competitive basis for those students who successfully complete the GMC. At a minimum, requirements for selection to the POC include successful completion of a four-week summer field training camp and an Air Force medical examination. The student must be of high moral character and demonstrate outstanding leadership potential. The student spends three hours per week in AFROTC courses. While enrolled in the POC, students receive up to \$450-\$550 per academic month (tax-free) in stipend as well as uniforms. Enrollment of foreign students is governed by Air Force regulations.

For both GMC and POC, students will be required to attend weekly physical training (three times per week) and leadership lab (2 hours per week). AFROTC leadership training activities are a part of each course and offer opportunities for practical leadership and teambuilding training and experience in a supervised environment. Students may also be eligible for different types of AFROTC scholarships. If available, scholarships may provide up to full college tuition, required fees, textbooks, and a monthly stipend.

Students who successfully complete the AFROTC program and graduates from the University are commissioned as second lieutenants in the active duty U.S. Air Force. Commitment incurred is normally four years; however, students designated for pilot or navigator training will serve a longer commitment, based on the current Air Force requirements.

For additional information, contact AFROTC, Bowling Green State University, 419-372-2176, email det620@bgsu.edu

DEPARTMENT OF AEROSPACE STUDIES

Subject - Aerospace Studies (AERO)

A TOTAL OF FOUR CREDITS EARNED IN AIR FORCE ROTC MAY COUNT TOWARD THE 120 SEMESTER HOURS NEEDED FOR GRADUATION IN THE COLLEGE OF ARTS & SCIENCES

AERO 1110 - Air Force Organization 1

2 Credits

Organization of the United States Air Force. Focus on missions involving airlift forces, strategic forces, tactical forces as well as overseas forces. Development and employment of weapons systems and logistic support functions. Leadership laboratory activities. Offered fall semester.

AERO 1120 - Air Force Organization 2

2 Credits

Organization of the United States Air Force. Focus on U.S. Defense policies, military balance between U.S. and eastern European forces as well as capabilities of Army, Navy and Reserve/Guard forces. Officership/professionalism and introduction to flight. Leadership laboratory activities. Offered spring semester.

AERO 2110 - Air Force History 1

2 Credits

Development of air power from the first lighter-than-air vehicles through the establishment of the Department of the Air Force as an independent military force. Various concepts of employment of air power and factors which have prompted research and technological change. Examples of impact of air power on strategic thought. Leadership laboratory activities. Offered fall semester.

AERO 2120 - Air Force History 2

2 Credits

Development of air power since the establishment of the independent Air Force to the present. Various concepts of employment of air power and factors which have prompted research and technological change. Examples of impact of air power on strategic thought. Leadership laboratory activities. Offered spring semester.

AERO 3110 - Air Force Management 1

3 Credits

Integrated management course emphasizing individual as a leader in the Air Force. Human behavior, individual and in groups, historical development of management thought, discussion of classical leadership theory; oral and written communication, military writing and briefing formats. Leadership laboratory activities. Offered fall semester. Course Attributes: Requires Department Approval.

AERO 3120 - Air Force Management 2

3 Credits

Continuation of AERO 3110. Air Force leadership, planning, organizing, coordinating, directing and controlling functions of management with emphasis on Air Force application, concept of command and staff, junior officer as administrative leader, Air Force personnel system, management of change, managerial strategy in changing environment. Leadership laboratory activities. Offered spring semester.

AERO 4110 - American National Security 1

3 Credits

Role of the President, the Congress and National Security Council in national security policy making; American defense strategy; alliances; regional security; arms control. Leadership laboratory activities. Offered fall semester. Course Attributes: Requires Department Approval.

AERO 4120 - American National Security 2

3 Credits

Air Force Officer as part of national security forces; military law; laws of armed conflict; the military profession; transition to military life; relations with civilian community. Leadership laboratory activities. Offered spring semester.

ARMY ROTC

Army ROTC is offered to students at Bowling Green State University (BGSU).

Students interested in attending Army ROTC courses at BGSU should Contact the Recruiting Operations Officer at 419-372-9968 or go to <http://www.bgsu.edu/departments/mils>

Students wishing to enroll in the BGSU Army ROTC courses should plan on attending classes in Bowling Green on Thursdays from 3 to 5:30 p.m. Students should enroll through ONU's course request system.

For more information, contact BGSU ROTC at 419-372-2476 or the Recruiting Operations Officer at 419-372-9968, email det620@bgsu.edu

DEPARTMENT OF ARMY ROTC

Subject - Army ROTC (ARMY)

A TOTAL OF FOUR CREDITS EARNED IN ARMY ROTC MAY COUNT TOWARD THE 120 SEMESTER HOURS NEEDED FOR GRADUATION IN THE COLLEGE OF ARTS & SCIENCES

ARMY 1000 - Lifetime Leadership Skills

2 Credits

Skills needed to be successful in a wide range of environments to include academic, corporate and military. Subjects include but are not limited to time management, memory comprehension, effective and efficient reading and effective note taking. Extensive leadership studies of both corporate and military settings focuses on interpersonal skills, professional ethics and officership. No military obligation or prerequisites.

ARMY 1010 - ROTC and the National Defense Organization

2 Credits

Background, programs, benefits and objectives of Army ROTC. Organization and functions of national defense establishment, with emphasis on the role of the U.S. Army. Extensive discussion of the role and responsibility of the Army officer.

ARMY 2010 - Leadership/Officership

2 Credits

Theoretical and practical leadership instruction. Examination of several aspects of communication and leadership concepts such as written and oral communication, effective listening, assertiveness, personality, adult development, motivation, and organizational culture and change. Emphasis on developing intellectual curiosity and clarifying practical applications.

ARMY 2020 - Military Tactics

2 Credits

Army tactics, principles of engagement and usage of military maps. Simulation exercises and war games will be utilized in class highlighting military tactics. No military obligation.

ARMY 3010 - Professionalism/Leadership

3 Credits

Professionalism and leadership required of the U.S. Army Officer; application of leadership principles and styles through case studies and role-playing exercises with emphasis on military situations. Participation in leadership labs, physical training program and field training exercises required. Requires completion of one of the following: ROTC basic course at BGSU; ROTC Basic Camp at Fort Knox, KY; prior active duty service; Army Reserve or Army National Guard basic training. Course Attributes: Requires Department Approval.

ARMY 3020 - Small Unit Operations

3 Credits

Organization and employment of basic military teams. Squad- and platoon-level tactical operations. Progressive leadership development through application of tactical principles. Participation in leadership labs, physical training program and field training exercises required.

ARMY 4010 - Unit Management and Officer Development

3 Credits

Concepts and fundamentals of Army unit administration, supply and material readiness. Professional officership techniques and military ethics. Management at the small unit level. Organizing, planning, and participating in field training exercises, participation in physical training and leadership labs. Course Attributes: Requires Department Approval.

ARMY 4020 - Military Law & Leadership

3 Credits

Organization and concepts of the U.S. Army judicial system including court martial and punitive actions. Fundamentals of the military decision making process. Discussions of various administrative details pertinent to newly commissioned lieutenants. Participation in field training exercises, physical training and leadership labs.

ARMY 4700 - Studies In Military Science

1 to 3 Credits

Offered on demand. Detailed study of selected military subjects. Offered on lecture basis in seminar or independent study depending on students' needs and nature of material. This course is repeatable for a total of 6 hours. Course Attributes: Requires Instructor Approval.



THE GETTY COLLEGE OF
Arts & Sciences

THE GETTY COLLEGE OF Arts & Sciences

Catherine Albrecht, *Dean*

Accredited by

American Chemical Society (ACS)
Association of Technology, Management, and Applied Engineering (ATMAE)
Commission on Accreditation of Allied Health Education Programs (CAAHEP)
Commission on Accreditation of Athletic Training Education (CAATE)
Commission on Collegiate Nursing Education (CCNE)
Committee on Accreditation for the Exercise Sciences
National Accrediting Agency for Clinical Laboratory Science (NAACLS)
National Association of Schools of Music (NASM)
National Council for Accreditation of Teacher Education (NCATE)
Ohio Board of Nursing (OBN)
Ohio Department of Education (ODE)

Membership in

Academy of Criminal Justice Sciences (ACJS)
American Association for Higher Education and Accreditation (AAHEA)
American Association of Colleges of Nursing (AACN)
American College Dance Festival Association (ACDFA)
American Correctional Association (ACA)
American Geographical Society (AGS)
American Historical Association (AHA)
American Mathematical Society (AMS)
American Physical Society (APS)
American Political Science Association (APSA)
Associated Collegiate Press (ACP)
Association for Practical and Professional Ethics (APPE)
Association for Theatre in Higher Education (ATHE)
Association for Women in Mathematics (AWM)
Association of Departments of Foreign Languages (ADFL)
Association of Technology, Management, and Applied Engineering (ATMAE)
Association of Writers and Writing Programs (AWP)
College Art Association (CAA)
College English Association (CEA)
College English Association of Ohio (CEO)
College Media Advisers (CMA)
Council of Colleges of Arts and Sciences (CCAS)
Foundation in Art: Theory and Education (FATE)
International Technology and Engineering Educators Association (ITEEA)
Mathematical Association of America (MAA)
Modern Language Association of America (MLA)
National Association for Sport and Physical Education (NASPE)
National Association of Schools of Music (NASM)
National Communication Association (NCA)
National Council of Teachers of English (NCTE)
National Council of Teachers of Mathematics (NCTM)
National Dance Education Organization (NDEO)
Ohio Academy of Science (OAS)
Ohio Biological Survey (OBS)
Ohio Council of Teachers of English Language Arts (OCTELA)
Ohio Newspaper Association (ONA)
Ohio Philosophical Association (OPA)
Ohio Scientific, Education, and Research Association (OSERA)
OhioDance
Public Relations Society of America (PRSA)
South Eastern Theatre Conference (SETC)
United States Institute of Theatre Technology (USITT)

Academic Divisions (Departments)

Education and Professional Studies (Education, Human Performance and Sport Sciences, Technological Studies)
Fine Arts (Art and Design, Music, Theatre Arts)

Humanities (English, Modern Languages, Philosophy and Religion)
Mathematics and Natural Sciences (Biological and Allied Health Sciences, Chemistry and Biochemistry, Mathematics and Statistics, Nursing, Physics and Astronomy)
Social Sciences (Communication and Media Studies; History, Politics and Justice; Psychology, Sociology, and Criminal Justice)

Endowed Chairs

The Eleanor H. and Robert W. Biggs Chair in Chemistry was established in 1992. The 2014-15 recipient is Dr. Jake Zimmerman.

The Eleanor H. and Robert W. Biggs Chair in the Arts was established in 1992. The 2014-15 recipient is Prof. Melissa Eddings.

The Eleanor H. and Robert W. Biggs Chair in Sciences was established in 1992. The 2014-15 recipient is Dr. Terry Sheridan.

The Wilfred E. Binkley Chair of History and Political Science, inaugurated in 1971, has been made possible by a grant from the Scaife Foundation of Pittsburgh. The 2014-15 recipient is Dr. Michael Loughlin.

The Irene Casteel Chair in Education, Professional and Social Sciences, was established in 1992 and funded by a bequest from Irene Casteel in 1998. The 2014-15 recipient is Dr. Kristie Payment.

The Mary Reichelderfer Chair in Mathematical Sciences was established in 1983 with funds from the estate of Mary K. Werkman. The recipient for 2014-15 is Dr. Ryan Rahrig.

The Sara A. Ridenour Chair of Humanities was established in 1983 from funds provided by her daughter. The recipient for 2013-14 is Dr. John Paul Kanwit.

The Kernan Robson Chair of Government, inaugurated in 1972, has been made possible by a trust established by the late Kernan Robson. The 2014-15 recipient is Dr. Kofi Nsia-Pepira.

Mission Statement

The Getty College of Arts & Sciences provides a broad-based education that fosters innovative problem-solving skills and teaches students to become independent thinkers and life-long learners. Students interact in small class environments directly with faculty dedicated to excellence in teaching and scholarship. Rigorous programs of study in the liberal and fine arts, sciences, and pre-professional programs provide strong theoretical foundations. Practical experiences in unique and state-of-the-art facilities ensure that students are competitive and well prepared for graduate programs, professional studies, and employment.

Admission Standards

Candidates seeking admission to the College of Arts & Sciences are required to meet the general requirements for admission to the University. The College of Arts & Sciences accepts high school graduates and non-graduates who have 16 acceptable units. Twelve of these units are as follows: 4 units in English; 2 units in mathematics; 6 units in history, social studies, languages or natural sciences, or any combination thereof. Candidates are strongly encouraged to complete four years of a foreign language while in high school. Acceptable scores on the American College Test or the College Entrance Examination Board tests are expected of all candidates.

University General Education Framework

The purpose of the Ohio Northern University general education program is to cultivate undergraduate student abilities as specified by general education learning outcomes. General education is defined as the courses that a student takes to achieve a well-rounded education. A learning outcome is defined as a fundamental ability that a student develops through completion of his or her ONU educational experience. All undergraduate students must, regardless of major or degree and in addition to all other graduation requirements, complete the university general education program to graduate from Ohio Northern University.

Learning Outcomes

All undergraduates must complete the following University general education learning outcomes:

1. Effective communication (both written and non-written)
2. Critical and creative thinking
3. Scientific and quantitative literacy
4. An understanding of diverse cultures and their effects on human interaction
5. Integration of concepts across disciplines
6. Informed and ethical responses to personal, civic, and global needs
7. Informed responses to aesthetics in art or nature

To demonstrate that they have met the general education learning outcomes, students generate artifacts in courses tagged as meeting those outcomes. Students may take general education courses both within and outside of their major areas of study, but at least 50 percent of the artifacts a student generates must be produced in courses outside of the major department.

Transitions Experience (TRES 1001)

The transitions experience has the following attributes:

1. It facilitates the student's transition from high school to college life;
2. It is mandatory for all undergraduate students during their first semester of study;
3. It demonstrates ties between general education and the major or potential major;
4. It addresses, at minimum, the general education learning outcome of Critical and Creative Thinking;
5. The student shall place in his or her electronic portfolio qualifying artifacts completed for this course;
6. The student can receive credit only once for a transitions experience course;
7. It is designed and delivered by the individual colleges; and
8. In the Colleges of business, engineering, and pharmacy, it may satisfy other degree requirements, but it will not satisfy any other degree requirements in the College of Arts & Sciences.

Writing Seminar (ENGL 1221)

The writing seminar has the following attributes:

1. It emphasizes English writing skills;
2. It is mandatory for all undergraduate students during their first year of study;
3. It addresses the general education learning outcome of Effective Communication (written);
4. The student shall place in his or her electronic portfolio one qualifying artifact completed for this course; and
5. It may satisfy other degree requirements established by the colleges.

Students whose native language is not English meet this requirement by successfully completing either Intensive College Composition 1 and 2 (ENGL 1411 and 1421) or College Composition 1 and 2 (ENGL 1511 and 1521).

Extra-disciplinary Seminar (EXDS 2001)

The extra-disciplinary seminar has the following attributes:

1. It expands a student's experience beyond the major by exploring from other disciplinary perspectives a common theme recommended by the General Education Committee and selected by the faculty;
2. Each extra-disciplinary seminar is uniquely developed by the instructor to reflect the common theme;
3. It is mandatory for all undergraduate students;
4. Students must enroll in an extra-disciplinary seminar located outside the student's own college or division;
5. Students may fulfill this requirement during the sophomore or junior year;
6. It addresses the general education learning outcome of Critical and Creative Thinking and one other general education learning outcome of the instructor's choice;
7. The student shall place in his or her electronic portfolio qualifying artifacts completed for this course; and
8. It may satisfy other degree requirements established by the colleges.

Senior Capstone Experience (4000-level)

Students graduating from the College of Arts & Sciences complete a senior capstone experience, integrating concepts from their major course of study with skills developed through their general education coursework into a final project or activity. The exact nature of the capstone experience depends upon the specific departmental major; the requirement may be fulfilled by a variety of senior-level events such as seminars, research projects or papers, recitals, exhibitions, or practicums.

The capstone has the following additional attributes:

1. It is a high-impact educational activity that a student completes at or near the end of his or her academic program;
2. Normally two terms in length, the timing and location of capstone activities are flexible;
3. It is mandatory for all undergraduate students;
4. It addresses, at minimum, the general education learning outcomes of Effective Communication and Critical and Creative Thinking;
5. The student shall place in his or her electronic portfolio qualifying artifacts completed for this course;
6. The student shall engage in a substantial project determined by the department or college;
7. It may be interdisciplinary; and
8. It may satisfy other degree requirements established by the colleges.

Degree Requirements

The College of Arts & Sciences offers a variety of majors under the framework of six different degrees: BA, BFA, BM, BS, BSMLS, and BSN. All degree-seeking students in the College must meet the following distribution requirements. An approved Honors Seminar may fulfill a requirement listed below for any degree offered by the College of Arts & Sciences. For specific information, see the Office of the Dean.

Distribution Requirements

To ensure that Arts & Sciences undergraduate students achieve the breadth of a liberal arts education, all students must take courses in the following disciplinary areas. These courses may be tagged for one or more general education learning outcomes. The distribution requirements may be met by extra-disciplinary seminars as well as by courses in the major.

- Humanities: Three non-activity courses, each of 2 credit hours or more, taken from different disciplines in philosophy, religion, history, or literature
- Fine Arts: One non-activity course of 2 credit hours or more taken from art, design, theatre arts (TADN, TADP, TAMT, or TATH), or music (MUSC) or four credit hours of a music ensemble (MUSE), a theatre arts practicum (TADN, TADP, TAMT, TATH), or dance (TADN)

MUSE 1011	University Singers
MUSE 1021	Symphony Orchestra
MUSE 1031	Wind Orchestra
MUSE 1041	Symphonic Band
MUSE 1051	Marching Band
MUSE 1111	Opera Workshop
MUSE 1131	Chamber Singers
MUSE 1141	A Capella Ensembles
MUSE 1151	Women's Chorus
MUSE 1161	Men's Chorus
MUSE 1171	Jazz Ensemble
MUSE 1181	Steel Drum Band
MUSE 1191	Brass Ensemble
MUSE 1201	Percussion Ensemble
MUSE 1211	String Ensemble
MUSE 1221	Woodwind Ensemble
MUSE 1231	Athletic Band
MUSE 1241	Composer's Workshop Ensemble
MUSE 1251	Chamber Music

Or four credit hours of a single, continuing theatre arts practicum:

TADN 2601	Dance Practicum
TADP 2571	Shop Practicum
TADP 2651	Stage Management Practicum
TADP 2761	Production Practicum
TADP 3761	Advanced Production Practicum

TADP 3781	Design Practicum
TAMT 2601	Musical Theatre Performance Practicum
TAMT 2611	Musical Theatre Pit Orchestra Practicum
TATH 2611	Theatre Performance Practicum
TATH 3621	Directing Practicum

Or four credit hours of a single style of dance:

- | | |
|-----------|------------------|
| TADN 1201 | Ballet I |
| TADN 1301 | Modern Dance I |
| TADN 1401 | Jazz Dance I |
| TADN 1501 | Tap Dance I |
| TADN 2201 | Ballet II |
| TADN 2301 | Modern Dance II |
| TADN 2401 | Jazz Dance II |
| TADN 2501 | Tap Dance II |
| TADN 3201 | Ballet III |
| TADN 3301 | Modern Dance III |
| TADN 3401 | Jazz Dance III |
| TADN 3501 | Tap Dance III |
| TADN 4201 | Ballet IV Pointe |
- Communication Studies: One 3-credit course (CAMS X3XX, e.g. CAMS 1301 Presentational Speaking)
 - Mathematics or Statistics: One non-activity course of 2 credit hours or more
 - Natural Sciences: One non-activity course of 2 credit hours or more
 - Social Sciences: One non-activity course of 2 credit hours or more

Bachelor of Arts

The following are the prescribed general education courses required of all students enrolled in a Bachelor of Arts degree program. This degree is available to students in most of the majors within the College of Arts & Sciences. (See Completing a Major on page 39.)

University General Education Framework (See page 37.)

Distribution Requirements (See page 38.)

Additional Requirements for the BA Degree

- Foreign language: First-year competency (two semesters)
- One additional course in the humanities outside the department
- One additional course in the fine arts outside the department
- One additional course in the social sciences outside the major

Bachelor of Fine Arts

The following are the prescribed general education courses required of all students enrolled in a Bachelor of Fine Arts degree program. This degree is available to students majoring in advertising design, graphic design, studio arts, theatre production and musical theatre.

University General Education Framework (See page 37.)

Distribution Requirements (See page 38.)

Additional Requirements for the BFA Degree

- One additional course in the fine arts outside the major
- One computer literacy course (for teacher licensure students only)

Bachelor of Music

The following are the prescribed general education courses required of all students enrolled in a Bachelor of Music degree program. This degree is available to students majoring in music education or performance.

University General Education Framework (See page 37.)

Distribution Requirements (See page 38.)

Additional Requirements for the BM Degree

- Foreign Language: First-year competency (two semesters) (for performance majors only)

Bachelor of Science

The following are the prescribed general education courses required of all students enrolled in a Bachelor of Science degree program. This degree is available to students in many of the majors within the College of Arts & Sciences. (See Completing a Major on page 39.) Specific requirements for the BS in Medical Laboratory Science and the BS in Nursing are listed under the Department of Biological and Allied Health Sciences and the Department of Nursing respectively.

University General Education Framework (See page 37.)

Distribution Requirements (See page 38.)

Additional Requirements for the BS Degree

- One additional course in the natural sciences outside the department
- One additional course in mathematics or statistics outside the department (students in all mathematics majors will take one additional course outside the major).
- One additional course in the natural sciences or mathematics or statistics outside the department (Math Education majors will take one additional course outside the major. All other math majors will take a natural science course outside the department).

Completing a Major

The degree candidate is required to complete in a logical sequence a major of not less than 30 semester hours. Students may be listed as majoring in general studies during their freshman and sophomore years, but they must select a distinct major with an appropriate degree by the start of their junior year of study. Students who have a particular interest in science may be listed as majoring in general science to insure an appropriate course selection in preparation for an eventual major in one of the basic or professional science programs. General science students should select a distinct major with an appropriate degree by the start of their sophomore year.

Candidates for a bachelor's degree who expect to teach in the public school are required to satisfy professional education requirements. In some majors, areas of concentration requiring at least 18 semester hours are provided allowing the student to focus on a specific area within a major.

Students pursuing a dual major or secondary academic program in two departments within the College of Arts & Sciences are required to meet each department's requirements for the major in that discipline.

The following major fields are offered for the bachelor's degree in the College of Arts & Sciences:

Major (Concentration)	Degree
Advertising Design	BA, BFA
Applied Mathematics	BA, BS
Art Education	BA
Athletic Training	BA, BS
Biochemistry	BS
Biology	BS
Chemistry	BA, BS
Communication Studies	BA
Construction Management	BS
Creative Writing	BA
Criminal Justice	BA
Education-Early Childhood	BA, BS
Education-Middle Childhood	BA, BS
Environmental and Field Biology	BS
Exercise Physiology	
(Clinical/Research)	BA, BS
(Corporate Fitness/Personal Training)	BA, BS
Forensic Biology	BS
French	BA
German	BA
Graphic Design	BA, BFA
History	BA
International Theatre Production	BFA
Language Arts Education	BA
Literature	BA

Manufacturing Technology	
(Applied Robotics)	BS
(Manufacturing Management)	BS
Mathematics	
(Advanced Mathematical Sciences)	BA, BS
(Teacher Licensure)	BA, BS
Medical Laboratory Science	BSMLS
Molecular Biology	BS
Multimedia Journalism	BA
Music	
(Applied Studies)	BA
(Music History and Literature)	BA
(Music Theory and Composition)	BA
Music Education	BM
Music Performance	BM
Musical Theatre	BFA
Nursing	BSN
Philosophy	BA
Philosophy, Politics, and Economics	BA
Physics	
(Applied Physics)	BS
(Astronomy)	BS
(Physics)	BS
Political Science	
(American Politics)	BA
(International Politics)	BA
Professional Writing	BA
Psychology	
(Behavioral Neuroscience)	BS
(Clinical and Counseling Psychology)	BA, BS
(General Psychology)	BA, BS
Public Relations	BA
Religion	
(Eastern)	BA
(Western)	BA
Social Studies	BA
Sociology	
(General Sociology)	BA
(Social Services Administration)	BA
Spanish	BA
Sport Management	BA, BS
Statistics	
(Actuarial Science)	BA, BS
(Applied Statistics)	BA, BS
Studio Arts	BA
(2D)	BFA
(3D)	BFA
(Pre-Art Therapy)	BFA
Technology Education	BS
Theatre	BA
Youth Ministry	BA

The Bachelor of Science in Medical Laboratory Science and Bachelor of Science in Nursing Degree Programs

A candidate for the Bachelor of Science in Medical Laboratory Science degree must complete the clinical year as well as other prescribed requirements. (See page 52.) A candidate for the Bachelor of Science in Nursing degree must complete the Clinical Capstone as well as other requirements. (See page 121.)

Minors

A formal program of academic minors is available in several of the subject matter areas. Consult the chair of the department in question for specific procedural instructions. Minors require a minimum of 18 semester hours of approved courses, including some work above the 2000 level. Minors are for students who wish to pursue organized study in a discipline without completing a major.

Options

A specific program of academic options is available in conjunction with several of the majors in the college. Included are options in criminal justice (forensic science) for students majoring in biology or molecular

biology, forensic science for students majoring in criminal justice, and pre-art therapy for students majoring in studio arts. The courses involved are listed under the department of the primary major. Accounting and business-related options are also available to all students in the College of Arts & Sciences. They are as follows:

Accounting Option

BIZ 2101	Accounting Foundations for Bus. Plan.	3 hrs
ACCT 2201	Accounting Foundations 2	3 hrs
One of the following sequences:		6 hrs
ACCT 3011/3021	Intermediate Accounting 1 & 2	
ACCT 3141/3151	Intermediate Managerial Accounting 1 & 2	
Two additional 3000-/4000-level business courses approved by the department of the student's major, at least one of which is an accounting course.		<u>6 hrs</u>
		18 hrs

Business Option

BIZ 2101	Accounting Foundations for Bus. Plan.	3 hrs
ABUS 2221	Principles of Entrepreneurship	3 hrs
BIZ 2131	Legal Environ. for Bus. Plan.	3 hrs
One of the following courses:		3 hrs
BIZ 2331	Behavioral Mgmt. for Bus. Plan.	
BIZ 2511	Marketing for Bus. Plan.	
BIZ 3621	Financial Analysis for Bus. Plan.	
Two additional 3000-/4000-level business courses approved by the department of the student's major.		<u>6 hrs</u>
		18 hrs

An option requires a minimum of 18 semester hours in coursework related to a specified department or discipline, but its original conception and continued integrity as a dynamic program may come from a source external to that department or discipline. Students should consult the chair of their major department for specific procedural instructions on all options.

Dual Degree Programs

Information concerning dual degree programs involving the College of Arts & Sciences appears on page 22 of this catalog. Students may receive further details in the Office of the Dean of the College.

Teacher Education

Ohio Northern University is vitally concerned with preparing effective teachers. The Center for Teacher Education is nationally accredited by the National Council for Accreditation of Teacher Education (NCATE). Programs are offered within the degree requirements in many departments.

Undergraduate students preparing to teach are expected to make formal application for admission into the teacher education program during the sophomore year. The exact semester of application depends on the licensure area. To be accepted, the student must have an overall cumulative grade point average of at least 2.50 with no grade less than "C" in specific professional education and basic requirement courses, achieve passing scores on the Core PRAXIS for Educators or equivalent, and meet other program requirements. The Center establishes additional policies for admission into the teacher education program and considers all applications for admission to the program.

Students with degrees from other accredited universities may pursue teacher licensure by completing the required professional education courses and content area courses required for their licensure area and passing appropriate state licensure exams and regulations.

Preprofessional Programs

Medical Sciences Programs

The Medical Sciences Advisory Committee oversees the advising of students in the areas of the medical sciences (pre-medicine, pre-dentistry, pre-veterinary medicine, etc.). The general objectives of the committee are to counsel students preparing for a career in the medical sciences, to serve as a source of information concerning preprofessional education in the medical sciences, and to serve as a source of recommendations to professional schools in the medical sciences.

The first year program usually includes biology, chemistry, English, and mathematics. After the first year, with the exceptions of organic chemistry and physics, the program is a function of the student's choice of departmental major and the specific requirements of the professional program being pursued. For further information, contact Chair, Medical Sciences Advisory Committee.

Pre-art Therapy

The curriculum prepares students majoring in studio arts to develop a professional portfolio that demonstrates mastery of skill and knowledge necessary to enter graduate school (Master's in Art Therapy). The option allows students the flexibility to minor in psychology.

Pre-law

Students in the pre-law program select a major and complete the necessary requirements like other students. The program is open to all students enrolled in any academic department of the Colleges of Arts & Sciences, Engineering, Pharmacy, or Business Administration. For additional information, see page 22.

Pre-occupational Therapy

The curriculum prepares students for entry into post-baccalaureate programs in occupational therapy. The program requires coursework in the following areas: biological sciences (biology, physiology, and human anatomy each with a laboratory component), behavioral sciences, written/verbal communication, physics, chemistry, biostatistics, medical terminology, and computer literacy. The pre-occupational therapy curriculum also includes completion of a one-semester internship in a therapy clinical setting. Because admission requirements, prerequisites and program components differ among post-baccalaureate programs, details of the curriculum may vary depending on the chosen graduate program. For further information, contact the Pre-occupational Therapy Coordinator, Department of Biological and Allied Health Sciences.

Pre-physical Therapy

The curriculum prepares students for entry into post-baccalaureate programs in physical therapy. Required courses include one year of biology, one year of general chemistry, one year of physics and one year of mathematics at the level of pre-calculus and above. Courses in psychology are required in addition to various recommended electives considered necessary for application to graduate programs. The pre-physical therapy curriculum also includes completion of a one semester internship in a therapy clinical setting. Because admission requirements, prerequisites and program components differ among post-baccalaureate programs, details of the curriculum may vary depending on the chosen graduate program. For further information, contact the Pre-physical Therapy Coordinator, Department of Biological and Allied Health Sciences.

Pre-physician Assistant

The pre-physician assistant program prepares students for entry into most master level physician assistant programs. The basic program, offered by the Department of Biological and Allied Health Sciences, includes one year of biology, one year of general chemistry, and one year of mathematics emphasizing biostatistics. Course requirements in biochemistry and organic chemistry will vary according to individual program requirements. Additional courses taken in the Biological and Allied Health Sciences department include physiology, human anatomy, developmental anatomy, basic emergency response, genetics, microbiology, immunology, as well as other biology courses and other required courses to fulfill the requirements for a Bachelor of Science degree in biology. The curriculum also includes courses in nutrition, philosophy, and psychology. For further information, contact the Pre-Physician Assistant Coordinator, Department of Biological and Allied Health Sciences.

Pre-seminary

A faculty member in the Department of Philosophy and Religion serves as advisor to pre-seminary students in planning a preprofessional program. The recommendations of the American Association of Theological Schools are followed in counseling the student. A major in the Department of Philosophy and Religion or in another appropriate department may be selected.

Credit for Intercollegiate Athletics

By participating in intercollegiate athletics, a student may receive a maximum of two additional credits that may be applied toward graduation. In order to receive credit for participation in intercollegiate athletics, a student-athlete must complete the entire season in good standing. An unsatisfactory grade will be assigned if a student-athlete quits the team, is dismissed from the team or participates in less than 50 percent of the season. Participation in intercollegiate athletics constitutes one hour of credit per sport to a maximum of two sports. Only one credit of intercollegiate participation in each sport may count toward graduation.

General Regulations

1. A student usually may not register for more than 19 hours of academic work unless he/she achieved a grade point average of 3.00 or better in the preceding semester, in which case the dean may grant permission for extra hours. See page 11 for overload charges beyond 19 credit hours. A normal program consists of 12 to 19 scheduled hours including physical education.
2. All new students in the College of Arts & Sciences are required to take a Transitions Experience course in their first term of enrollment. For students transferring to Ohio Northern University's College of Arts & Sciences from another institution, students who transfer in fewer than 30 semester hours will be required to take a Transitions Experience course.
3. A student indicates a choice of major field by filling out a declaration of major form available in the office of the department chair or dean.
4. No course for which a student has received a "D" is generally acceptable toward a major, secondary academic program, minor, option, or area of concentration. A department chair may allow one "D" toward the academic program at his/her discretion.
5. Juniors and seniors are expected to schedule a majority of their courses from the 3000- and 4000-levels.
6. With the permission of the instructor and the department chair, any course prerequisite may be waived.
7. Except where noted, credit hours earned in repeated courses may count only once toward the total hours required for graduation.
8. The Writing Seminar should be completed by all freshmen during their first year on campus. The Writing Seminar is required of all transfer students who have not completed a transferable writing course at the prior institution.

S/U Grade Option

Students in the College of Arts & Sciences are given the opportunity to register for one course per semester on a S/U (Satisfactory/Unsatisfactory) options basis, with the following stipulations:

1. The student must have sophomore, junior, senior or post-grad standing.
2. The requested course cannot count toward fulfillment of major, secondary academic program, minor, concentration or option requirements.
3. The requested course cannot be a 1000-level general education course.
4. The grade of "S" is to be equated with A, B, C. The grade of "U" is equated with D or F.
5. Students cannot change the grading system after the second week of class.

Classification of Students

For purpose of classification, the minimum requirement for sophomore standing is 30 semester hours of academic work; for junior standing, 60 semester hours; for senior standing, 90 semester hours.

Academic Standing

A grade point average (GPA) of 2.00 is required for graduation. If a student's cumulative grade point average falls below 2.00, the student is placed on academic probation. The student can return to good academic standing by raising his/her cumulative grade point average to 2.00 or above.

For students entering or readmitted to Ohio Northern University in the fall 2008 or later:

Those who have earned fewer than 25 quarter credit hours or 24 semester credit hours total must maintain at least a 1.80 cumulative grade point average to participate in competitive activities of individuals, team, or other groups officially designated as representing the University.

Those who have earned more than 25 quarter credit hours or 24 semester credit hours total must maintain at least a 2.00 cumulative grade point average to participate in competitive activities of individuals, teams, or other groups officially designated as representing the University.

Any student on probation who does not earn a minimum 2.00 term GPA the semester following placement on probation will have his/her record reviewed by the Committee on Academic Qualifications (CAQ) of the college. The committee may then recommend to the dean that the student be subject to academic actions which may include suspension or dismissal. Students on probation are expected to comply with all special requirements established by the dean's office. Failure to do so may result in administrative cancellation of the student's registration. Any student with a term GPA of 1.00 or lower may be placed on probation or suspended.

If action is taken to suspend a student, the suspension will be for a definite period of time, after which the student may apply for readmission. If readmission is granted, the Committee on Academic Qualifications may establish certain conditions of academic performance for the student to remain enrolled in the College of Arts & Sciences. Continued poor performance by a readmitted student will lead to dismissal.

If action is taken to dismiss a student, it is to be regarded as a terminal action, and the student is not eligible to apply for readmission to the College of Arts & Sciences at any time thereafter. A complete list of CAQ Academic Action Guidelines is available for review in the dean's office of the College of Arts & Sciences.

Graduation

To graduate with a Bachelor of Arts, a Bachelor of Fine Arts, Bachelor of Music or a Bachelor of Science degree, a student is required to complete a minimum of 120 semester hours which includes the appropriate general education courses, complete an approved major, and have a cumulative point average of at least 2.00. Some majors require more than 120 semester hours to complete.

The music education major must also complete all course work and observation hours required by the state of Ohio for teacher licensure.

To graduate with a Bachelor of Science in Medical Laboratory Science, a student must also successfully complete one year of clinical training at the approved program subsequent to completing prescribed preclinical coursework.

To graduate with a Bachelor of Science in Nursing, a student must also earn a minimum of a C grade in ALL nursing core courses and successfully complete ALL clinical rotations to meet eligibility requirements for a Professional Pre-licensure Nursing Education Program (ORC Rule 4723-5-13).

The minimum residency requirement for all students is the last two semesters and the completion of at least 30 semester hours with at least 60 quality points elected mostly from 3000- and 4000-level courses.

COLLEGE OF ARTS & SCIENCES COURSES

Subject - Transitions Experience (TRES)

See course sections for specific attributes.

TRES 1001 - Transitions Experience

3 Credits

Designed to facilitate students' transition from high school to university by introducing the skills and habits of mind necessary for success at this level. Individual sections will be designed around topics that deal with various disciplines. Students will develop critical and creative thinking skills and make connections between their major and the general education program. Must be enrolled in one of the following Colleges: Arts and Sciences. Must be enrolled in one of the following Classifications: Freshman.

Subject - General Arts & Sciences (AASG)

AASG 0961 - Study Skills

1 Credit

To increase study efficiency by emphasizing improvement in motivation, concentration and memory. Attention is also given to selected study skills including time-management, listening, note-taking, reading comprehension and testing. CREDIT EARNED DOES NOT SATISFY GRADUATION REQUIREMENTS FOR ANY PROGRAM OFFERED AT THE UNIVERSITY. Formerly AASG 010. Course Attributes: Requires Instructor Approval.

AASG 0971 - Introduction to College Reading

2 Credits

Designed to increase reading proficiency by focusing on comprehension, vocabulary, reading speed, and study skills. Reading ACT score of 18 or below OR enrollment in AASG 0991 is required. CREDIT EARNED DOES NOT SATISFY GRADUATION REQUIREMENTS FOR ANY PROGRAM OFFERED AT THE UNIVERSITY. Formerly AASG 005. Must be enrolled in one of the following Classifications: Freshman.

AASG 0991 - Introduction to College Writing

3 Credits

Intensive instruction and practice in college-level writing. English ACT score of 16 or below is required. Student must pass writing proficiency to progress to ENGL 1221. CREDIT EARNED DOES NOT SATISFY GRADUATION REQUIREMENTS FOR ANY PROGRAM OFFERED AT THE UNIVERSITY. Formerly ENGL 105. Corequisite(s): AASG 0971. Must be enrolled in one of the following Classifications: Freshman.

AASG 1101 - Pre-Law Orientation

1 Credit Grading mode is S/U

How to prepare for admission to law school. Introduction to legal education and the legal profession. This course may be repeated 1 time.

AASG 1111 - Introduction to Legal Reasoning

1 Credit

Introduction to how to think like a lawyer. Includes rules and the rule of law, the use of precedent and authority, the interpretation of precedent and statutes, law making versus rule making. This course is repeatable for a total of 1 hour.

AASG 1121 - Analytical Reasoning

1 Credit

Explore analytical reasoning in the various branches of the law. Develop and improve analytical reasoning abilities. Appreciate the role of future coursework in developing analytical reasoning ability. Assess analytical reasoning abilities as measured by the LSAT.

AASG 1131 - Pre-Law Seminar

1 Credit

Preparation for applying to law school and a career in the legal profession. Includes writing the application essay, constructing a resume, LSAT preparation, choosing the right law school, introduction to the legal profession. This course is repeatable for a total of 1 hour.

AASG 1951 - Publication Activities Practicum

1 Credit Grading mode is S/U

Participation in design, photography, writing, and producing the Ohio Northern University yearbook. Formerly AASG 110. This course is repeatable for a total of 11 hours.

AASG 2011 - Perspectives in Medical Humanities

3 credits

An introduction to the interdisciplinary field of medical humanities. The course examines the human dimension of health care through the study of literature, art and other humanities disciplines to explore the ways in which culture and society work to influence the understanding of medicine. Course Attributes: Humanities, Critical and Creative Thinking, Diversity- Human Interaction.

AASG 3001 - Career Search Strategies

1 Credit

An experiential environment facilitating learning skills that enable development and implementation of personalized and successful intern, professional employment and graduate/professional school search strategies.

AASG 4011 - Integrative Portfolio in Medical Humanities

1 credit

Required for completion of the medical humanities minor. Includes the creation of a portfolio of papers written throughout coursework the minor, as well as the composition of a cumulative essay that synthesizes those papers to demonstrate an interdisciplinary connection in the field of medical humanities. Course Attributes: Effective Communication Writing, Critical and Creative Thinking.

DEPARTMENT OF ART AND DESIGN

Associate Professors Eddings, Rowe, Sheets; **Assistant Professors** Mancuso (*Chair*)

Mission Statement

The visual arts program integrates traditional and contemporary approaches to the creation of art and design. The primary goal is to develop students as creative, productive and intellectually curious artists or designers capable of historical insight, critical thinking and technical proficiency in their areas of emphasis. Our program combines professional training and broad study in the liberal arts so that students majoring in art and design receive as comprehensive an understanding of the discipline as possible; become cognizant of historical and cultural knowledge of the past and present; and develop competence in the use of tools, materials and processes in their profession.

Vision Statement

To be a leading program in the region by setting the standard for educating artists, designers and art educators. To be recognized for an education program that integrates professional and liberal arts education: conceptual development, intellectual capacity, professional skills and artistic expression. To be acknowledged as a contributor to the scholarship within the fields of art, design and art education. To be a leader in the community in fostering and providing art, design and education programs.

Accreditation

The art education licensure program to teach K-12 is approved by the Ohio Department of Education. The Teacher Education Program is accredited by the National Council for Accreditation of Teacher Education (NCATE).

Majors, Minors and Degrees Offered

Advertising Design Major (BA, BFA)
Art Education Major (BA)
Graphic Design Major (BA, BFA)
Studio Arts Major (BA)
 2D Concentration (BFA)
 3D Concentration (BFA)
 Pre-Art Therapy Option (BFA)
Art Minor
Design Minor

Admission Requirements

Candidates seeking admission are required to meet the general requirements for admission to the University. Although not required during the admission process, each prospective student is encouraged to submit a portfolio demonstrating ability in compositional, conceptual and technical skills. Portfolio reviews are required for Talent Awards (scholarships) that are renewable for four years. Portfolios should consist of at least ten pieces of original work. Students may bring three-dimensional work to an interview, but such work is not accepted via mail.

All students enter the art and design program as BA candidates during the first year of study. The Foundations Program provides students with a basis for critical and creative thinking and a common, broad range of experiences. Students may elect the BFA degree program after passing the sophomore assessment. Continuing ONU students wishing to change their major to art and design should contact the department at 419-772-2160.

Transfer applicants must comply with all university requirements and procedures. In addition, a portfolio review by the department is required for all work completed in studio courses for which the applicant wishes

transfer credit. Transfer credit is granted only when faculty assess that the quality of the work in the studio is equivalent to that which would earn a grade of a C (2.00) or better in a comparable course at Ohio Northern. Failure to submit a portfolio results in loss of opportunity to transfer studio credit. A maximum of 33 credit hours in art/design may be transferred to Ohio Northern (only 9 credit hours in art/design may be transferred for a minor). The final two semesters in art/design must be earned at Ohio Northern. Students must also complete the Sophomore Review and Senior Capstone.

Special Programs

Internships

Internships are an integral part of our educational program. They give students the opportunity to affirm career goals and gain experience in a chosen field while making invaluable connections in the profession. All students in the BFA degree programs, regardless of major, are required to participate in the internship program. For art education majors, student teaching is required for graduation and licensure. Studio arts majors must complete an internship, externship or study abroad. In special occasions, domestic study in an approved program also may fulfill this requirement. For design majors, students are required to complete an internship in a graphic or advertising design setting, either during a summer or regular academic term.

Study Abroad

The visual arts program is at the forefront of the university's efforts to expand its international experiences for students at Ohio Northern. The department already has specific cooperative art exchange agreements with the University of the Arts London (Chelsea College of Art and Design) in England and the University of Ulster in Belfast, Northern Ireland. The University also has agreements with the Studio Art Centers International, Florence, Italy and the Burren School of Art in Co. Clare, Ireland. Numerous other international opportunities are available to students at Ohio Northern including studying in Cuba, South America and Europe. ONU is a member of the University Studies Abroad Consortium (USAC) that provides many study-abroad and internship opportunities.

Community Outreach

The Department of Art and Design is leading educational efforts at Ohio Northern to expand its educational outreach and connections. Translating what students learn in the classroom to real world art and design solutions is key to our educational mission. The outreach program provides students important opportunities to develop relevant workplace skills and leadership as they work with clients and many other professionals from the community.

Major Course Requirements

Art and design majors with sophomore standing must participate in Sophomore Review. This assessment gauges student learning based on the department's program objectives. All students graduating from the University participate in a senior capstone experience which allows students to integrate many concepts and theories from their course of study into a final project or activity.

Exhibiting is an important component of the student's educational experience. Exhibition requirements for majors in the department include the Foundations Honors Exhibit, Junior BA/BFA Exhibit, Works-in-Progress Exhibit, Senior BA/BFA Exhibit (capstone). All art and design majors are required to enter work in the juried exhibit held each year. Majors with sophomore standing are responsible for the organization and preparation of this show. As part of the senior capstone experience, all majors are required to submit work to a professional (external) juried exhibit, competition or scholarship.

Advertising Design Major

This interdisciplinary program integrates liberal arts studies and design with marketing courses from the business college. The major provides students broad knowledge of the principles, theories and skills of visual communication. First-year courses focus on liberal arts, visual theories, materials and methods. Courses during the second and third year engage students in the concentration and development within advertising design. The fourth year involves integration with advanced study. Candidates may choose the BFA degree program with a rigorous study

in advertising design or the BA degree program with intense study and a major or minor in another discipline.

BA Degree Requirements (75 credit hours)

ART 1651	Visual Literacy (3)
ART 1101	Visual Foundations 1 (3)
ART 1111	Visual Foundations 2 (3)
ART 1501	3D Design Foundations (3)
DSGN 1101	Photography & Communication (3)
ART xxx1	Print & Paper 1 or 2 (3)
ART xxx1	Painting or Watercolor (3)
ART 2601	Art History 1 (3)
ART 2611	Art History 2 (3)
DSGN 1201	Intro Visual Communication (3)
DSGN 1301	Typography (3)
DSGN 2401	Narrative Structures (3)
DSGN 3401	Identity & Packaging Design (3)
DSGN 3501	Persuasive Design (3)
DSGN 3551	Advertising Design 1 (3)
DSGN 3561	Advertising Design 2 (3)
DSGN 2601	Design Research Methods (3)
TECH 1421	Web Design (3)
DSGN 4601	Professional Practices in Design (3)
DSGN 4901	Senior Capstone 1 (3)
DSGN 4911	Senior Capstone 2 (3)

Other Required Courses

CAMS 1201	Intro to Public Relations (3)
BIZ 2511	Marketing for Business Planning (3)
MRKT 3521	Consumer Behavior (3)
MRKT 4601	Integrated Marketing Communication (3)

BFA Degree Requirements (84 credit hours)

ART 1651	Visual Literacy (3)
ART 1101	Visual Foundations 1 (3)
ART 1111	Visual Foundations 2 (3)
ART 1501	3D Design Foundations (3)
DSGN 1101	Photography & Communication (3)
ART xxx1	Print & Paper 1 or 2 (3)
ART xxx1	Painting or Watercolor (3)
ART 2601	Art History 1 (3)
ART 2611	Art History 2 (3)
DSGN 1201	Intro Visual Communication Design (3)
DSGN 1301	Typography (3)
DSGN 2401	Narrative Structures Design (3)
DSGN 3401	Identity & Packaging Design (3)
DSGN 3501	Persuasive Design (3)
DSGN 3551	Advertising Design 1 (3)
DSGN 3561	Advertising Design 2 (3)
DSGN 2601	Design Research Methods (3)
DSGN 2651	History of Graphic Design (3)
DSGN 4601	Professional Practice in Design (3)
TECH 1421	Web Design (3)
DSGN 4201	Advanced Visual Comm. Design (3)
DSGN 4901	Senior Capstone in Design 1 (3)
DSGN 4911	Senior Capstone in Design 2 (3)
DSGN 4921	Internship (1-3)

Other Required Courses

CAMS 1201	Intro to Public Relations (3)
BIZ 2511	Marketing for Business Planning (3)
MRKT 3521	Consumer Behavior (3)
MRKT 4601	Integrated Marketing Communication (3)

Art Education Major

The art education major is an intensive full-time teacher preparation program that enables students to earn Multi-Age (PK-12) Visual Arts Licensure.

BA Degree Requirements (83 credit hours)

ART 1651	Visual Literacy (3)
ART 1101	Visual Foundations 1 (3)
ART 1111	Visual Foundations 2 (3)
ART 1501	3D Design (3)
DSGN 1101	Photography & Communication (3)

DSGN 1201	Introductory Visual Communication Design (3)
ART 2401	Ceramics 1 (3)
ART 2601	Art History 1 (3)
ART 2611	Art History 2 (3)
ART 2651	Non-Western Art (3)
ART 2801	Book Arts (3)
ART 4901	Senior Capstone 1 (3)

Choose one:

ART 2201	Painting 1 (3)
ART 2251	Watercolor (3)

Choose one:

ART 2501	Sculpture: Additive & Subtractive (3)
ART 2551	Sculpture: Small Metals (3)
ART 3501	Sculpture: Model Making & Casting (3)
ART 3511	Sculpture: Installation (3)

Choose one:

ART 3301	Print and Paper 1 (3)
ART 3311	Print and Paper 2 (3)

Professional Education Requirements Ohio Northern's teacher education program provides general education, subject area concentration, and professional educational experiences that will enable the student to enter the profession of teaching with competency. Admission, requirements and courses are listed under the Center for Teacher Education. (See page 69)

Additional requirements (41 credit hours)

CAMS 1311	Communication in the Classroom (3)
PSYC 2151	Development Across the Lifespan (3)
EDUC 1151	Culture and Schooling (3) (20 hours field)
EDUC 2101	Exceptional Learner (3) (20 hours field)
EDUC 2681	Curriculum and Assessment (3) (20 hours field)
EDUC 3451	Literacy in the Content Area (3) (20 hours field)
EDUC 3201	Instructional Media/Ed Tech (3)
EDUC 4401	Educational Psychology (3) (20 hours field)
EDUC 4451	Leadership Seminar in Ed (2)
EDUC 4571	Integrated Art Methods (3) (20 hours field)
EDUC 4741	Student Teaching/MA (12)

Graphic Design Major

The graphic design major provides students broad knowledge of the principles, theories and skills of visual communication. First-year courses focus on liberal arts, visual theories, materials and methods. Courses during the second and third year engage students in development within graphic design. The fourth year combines design integration with advanced study. Candidates may choose the BFA degree program with a rigorous study in graphic design or the BA degree program with intense study and a major or minor in another discipline.

BA Degree Requirements (61 credit hours)

ART 1651	Visual Literacy (3)
ART 1101	Visual Foundations 1 (3)
ART 1111	Visual Foundations 2 (3)
ART 1501	3D Design Foundations (3)
DSGN 1101	Photography & Communication (3)
ART xxx1	Print & Paper (3)
ART xxx1	Painting or Watercolor (3)
ART 2801	Book Arts (3)
ART 2601	Art History 1 (3)
ART 2611	Art History 2 (3)
DSGN 1201	Intro Visual Communication (3)
DSGN 1301	Typography (3)
DSGN 2401	Narrative Structures (3)
DSGN 3401	Identity & Packaging Design (3)
DSGN 3501	Persuasive Design (3)
DSGN 2601	Design Research Methods (3)
TECH 1421	Web Design (3)
DSGN 4601	Professional Practices in Design (3)
DSGN 4901	Senior Capstone 1 (3)
DSGN 4911	Senior Capstone 2 (3)

Other Required Courses
CAMS 1201 Intro to Public Relations (3)

BFA Degree Requirements (72 credit hours)

ART 1651 Visual Literacy (3)
ART 1101 Visual Foundations 1 (3)
ART 1111 Visual Foundations 2 (3)
ART 1501 3D Design Foundations (3)
DSGN 1101 Photography & Communication (3)
ART xxx1 Print & Paper 1 or 2 (3)
ART xxx1 Painting or Watercolor (3)
ART 2801 Book Arts (3)
ART 2601 Art History 1 (3)
ART 2611 Art History 2 (3)
DSGN 1201 Intro Visual Communication Design (3)
DSGN 1301 Typography (3)
DSGN 2401 Narrative Structures Design (3)
DSGN 3401 Identity & Packaging Design (3)
DSGN 3501 Persuasive Design (3)
DSGN 2601 Design Research Methods (3)
DSGN 2651 History of Graphic Design (3)
DSGN 4601 Professional Practice in Design (3)
TECH 1421 Web Design (3)
DSGN 4201 Advanced Visual Comm. Design (3)
DSGN 4901 Senior Capstone in Design 1 (3)
DSGN 4911 Senior Capstone in Design 2 (3)
DSGN 4921 Internship (1-3)

Other Required Courses
CAMS 1201 Intro to Public Relations

Studio Arts Major

The studio arts major integrates art and design courses with liberal arts studies. Candidates pursue one of two degree programs. The BA degree program is designed for intense study with the option of a major or minor in another discipline. The BFA degree program is a rigorous study in the visual arts; students pursuing this degree must select a 2D concentration, a 3D concentration or an option in pre-art therapy.

BA Degree Requirements (51 credit hours)

ART 1651 Visual Literacy (3)
ART 1101 Visual Foundations 1 (3)
ART 1111 Visual Foundations 2 (3)
ART 1501 3D Design (3)
DSGN 1101 Photography & Communication (3)
ART 2111 Life Drawing (3)
ART 2401 Ceramics 1 (3)
ART 2601 Art History 1 (3)
ART 2611 Art History 2 (3)
ART 2651 Non-Western Art (3)
ART 2801 Book Arts (3)
ART 4901 Senior Capstone 1 (3)
ART 4911 Senior Capstone 2 (3)

Choose one:

ART 2201 Painting 1 (3)
ART 2251 Watercolor (3)

Choose one:

ART 2501 Sculpture: Additive & Subtractive (3)
ART 2551 Sculpture: Small Metals (3)
ART 3501 Sculpture: Model Making & Casting (3)
ART 3511 Sculpture: Installation (3)

Choose one:

ART 3301 Print and Paper 1 (3)
ART 3311 Print and Paper 2 (3)

Choose one:

ART 4101 Advanced Illustration (3)
ART 4111 Advanced Life Drawing (3)
ART 4201 Advanced Painting (3)

ART 4301 Advanced Print and Paper (3)
ART 4401 Advanced Ceramics (3)
ART 4501 Advanced Sculpture (3)
ART 4701 Advanced Book Arts (3)

BFA Degree Requirements (78 credit hours)

ART 1651 Visual Literacy (3)
ART 1101 Visual Foundations 1 (3)
ART 1111 Visual Foundations 2 (3)
ART 1501 3D Design (3)
DSGN 1101 Photography & Communication (3)
ART 2111 Life Drawing (3)
ART 2401 Ceramics 1 (3)
ART 3401 Ceramics 2 (3)
ART 2601 Art History 1 (3)
ART 2611 Art History 2 (3)
ART 2651 Non-Western Art (3)
ART 2801 Book Arts (3)
ART 3301 Print and Paper 1 (3)
ART 3311 Print and Paper 2 (3)
ART 4901 Senior Capstone 1 (3)
ART 4911 Senior Capstone 2 (3)

Choose two:

ART 2201 Painting 1 (3)
ART 3401 Painting 2 (3)
ART 2251 Watercolor (3)

Choose two:

ART 2501 Sculpture: Additive & Subtractive (3)
ART 2551 Sculpture: Small Metals (3)
ART 3501 Sculpture: Model Making & Casting (3)
ART 3511 Sculpture: Installation (3)

2D Concentration Students have the option of choosing an area of emphasis, such as illustration, painting or printmaking. Six courses (18 credits) in 2D media at the advanced level are required; certain 2D media courses may be repeated for credit.

Choose:

ART 2251 Watercolor (3)
ART 4101 Advanced Illustration (3)
ART 4111 Advanced Life Drawing (3)
ART 4201 Advanced Painting (3)
ART 4301 Advanced Print and Paper (3)
ART 4701 Advanced Book Arts (3)

3D Concentration Students have the option of choosing an area of emphasis, such as ceramics or sculpture. Six courses (18 credits) in 3D media at the 3000-level and above are required; certain 3D media courses may be repeated for credit.

Choose:

ART 3501 Sculpture: Model Making & Casting (3)
ART 3511 Sculpture: Installation (3)
ART 4401 Advanced Ceramics (3)
ART 4501 Advanced Sculpture (3)

Pre-Art Therapy Option Practitioners of art therapy help people to better understand themselves and their world. ONU's pre-art therapy option prepares students to develop a professional portfolio that demonstrates mastery of skill and knowledge necessary to enter graduate school (Masters in art therapy). The option allows students the flexibility to minor in psychology.

PSYC 1001 Psychology (3)
PSYC 2151 Development across the Lifespan (3)
PSYC 2121 Psychology of Personality (3)
PSYC 3121 Psychological Assessment (3)
PSYC 4201 Abnormal Psychology (3)
PSYC xxx1 Psychology elective (3)

Minors

A minor is available only to non-art and design majors.

Art Minor

ART 1651 Visual Literacy (1)
ART 1101 Visual Foundations 1 (3)
ART 1111 Visual Foundations 2 (3)
ART 1501 3D Design (3)
2 art electives at the 2000 level or above

Design Minor

ART 1101 Visual Foundations 1 (3)
ART 1111 Visual Foundations 2 (3)
DSGN 1201 Introductory Visual Communication Design (3)
DSGN 1301 Typography (3)
DSGN 2601 Design Research Methods (3)
2 design electives at the 2000 level or above

Subject - Art (ART)

ART 1101 - Visual Foundations 1

3 Credits

Composition, perception and analysis of visual space through direct observation and the manipulation of elements and principles of design. Offered fall semester. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

ART 1111 - Visual Foundations 2

3 Credits

Drawing and design as a means of expression, invention and communication through interaction of perceptual skills, visual language, subject matter and color organization, phenomena, and interaction. Offered spring semester. Prerequisite(s): ART 1101 or ART 150. Course Attributes: Fine Arts.

ART 1501 - 3-D Design

3 Credits

The visual language, methods and techniques of three-dimensional design. Emphasis on conceptual thinking skills. Offered spring semester. Course Attributes: Fine Arts, Critical and Creative Thinking, Informed Responses-Aesthetics.

ART 1651 - Visual Literacy

3 Credits

Analysis into the theories, practices, techniques, language and media of the visual arts and design. Fundamentals of art historical study, styles and periods. Focus on major works from prehistoric world through contemporary issues to cultural and social contexts. Emphasis on identifying relationships between composition, form and content. Offered fall and spring semesters. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

ART 1911 - ST-Summer Honors Institute

1 Credit Grading mode is S/U

Topics in the Art and Design field. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ART 1981 - Special Topics in Art

1 to 3 Credits Grading mode is S/U

Topics in art. Enrollment restricted to attendees of the Summer Honors Institute. May repeat as topic varies. This course may be repeated 3 times.

ART 1991 - Special Topics in Art and Design

1 to 3 Credits

May repeat as topic varies. This course may be repeated 2 times.

ART 2111 - Life Drawing

3 Credits

Composition, proportion, structure and form from direct observation of the human figure. Offered alternate spring semester. Prerequisite(s): ART 1111 or (ART 160 and ART 170). Course Attributes: Fine Arts.

ART 2201 - Painting 1

3 Credits

Concepts and competencies of painting through direct observation. Offered fall semester. Course Attributes: Fine Arts, Critical and Creative Thinking, Informed Responses-Aesthetics.

ART 2211 - Painting 2

3 Credits

Creating and controlling visual space and form and their relationship to composition. Offered alternate spring semesters. Prerequisite(s): ART 2201 or ART 250. Course Attributes: Fine Arts.

ART 2251 - Watercolor

3 Credits

Concepts, competencies and techniques of aqueous media through composition. Offered alternate spring semesters. This course may be repeated 2 times. Course Attributes: Fine Arts.

ART 2401 - Ceramics 1

3 Credits

Composition and methods of forming clay objects using various hand building and wheel throwing techniques, including decorating, glazing and firing. Offered fall semester. Course Attributes: Fine Arts, Critical and Creative Thinking, Informed Responses-Aesthetics, Integration Across Disciplines.

ART 2501 - Sculpture: Additive & Subtractive

3 Credits

The composition and rendering of sculpture in clay, plaster, wood, and stone. Emphasis on technical skills and the organization of form and space. Offered alternate fall semesters. Course Attributes: Fine Arts.

ART 2551 - Sculpture: Small Metals

3 Credits

The visual language, concepts, materials and technical skills of small-scale sculpture. Offered alternate spring semesters. Course Attributes: Fine Arts.

ART 2601 - Art History 1

3 Credits

Western tradition of painting, sculpture and architecture from the Prehistoric era through the Renaissance. Offered fall semester. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

ART 2611 - Art History 2

3 Credits

Western tradition of painting, sculpture and architecture from the 16th century to contemporary. Offered spring semester. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

ART 2651 - Non-Western Art

3 Credits

Painting, sculpture and architecture beyond the Western tradition such as India, Southeast Asia, Africa, Japan, Korea, the Pacific area and the Americas. Offered alternate spring semesters. This course may be repeated 2 times. Course Attributes: Non Western Cultural, Fine Arts, Critical and Creative Thinking, Informed Responses-Aesthetics.

ART 2801 - Book Arts

3 Credits

An introduction to the book arts as a medium of creative expression, communication, design, and innovation. Drawing upon both the historic and contemporary western bookbinding tradition, this course is an initiation into fundamental binding forms, techniques, and materials. Offered spring semester. This course may be repeated 2 times. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

ART 2991 - Special Topics in Art and Design

1 to 3 Credits

May repeat as topic varies. This course may be repeated 2 times.

ART 3301 - Print and Paper 1

3 Credits

Fundamentals of screen printing. Emphasis on developing the technical and conceptual skills to be able to produce a more individual image and personal aesthetic. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

ART 3311 - Print and Paper 2

3 Credits

Fundamentals of letterpress and relief printing. Emphasis on the technical and aesthetic aspects of both processes. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

ART 3401 - Ceramics 2*3 Credits*

Advanced methods and techniques of forming clay objects; hand building, wheel throwing, plazing and firing. Offered alternate spring semester. Prerequisite(s): ART 2401 or ART 255. Course Attributes: Fine Arts.

ART 3501 - Sculpture: Mold Making & Casting*3 Credits*

The composition and methods of plaster molds for reproduction and altering of direct cast ceramics and in lost wax casting of bronze. Emphasis on organizational problems of form and space. Offered alternate spring semesters. Course Attributes: Fine Arts.

ART 3511 - Sculpture: Installation*3 Credits*

Design of sculptural environments and site-specific work. Offered alternate fall semesters. Course Attributes: Fine Arts.

ART 3991 - Special Topics in Art and Design*1 to 3 Credits*

May repeat as topic varies. This course may be repeated 2 times.

ART 4101 - Advanced Illustration*3 Credits*

Innovative visual solutions in illustration and the mastery of advanced techniques through creative and professional work habits. Offered spring semester. Prerequisite(s): ART 1111 or (ART 160 and ART 170 and ART 210). This course may be repeated 2 times. Course Attributes: Fine Arts.

ART 4111 - Advanced Life Drawing*3 Credits*

Structure of the human body with the aim of producing drawings of greater structural and visual integrity. Offered spring semester. Prerequisite(s): ART 2111 or ART 210. This course may be repeated 2 times. Course Attributes: Fine Arts.

ART 4201 - Advanced Painting*3 Credits*

Creating and controlling pictorial space and form and their relationship to concept and composition. Offered spring semester. Prerequisite(s): ART 2211 or ART 2251. This course may be repeated 2 times. Course Attributes: Fine Arts.

ART 4301 - Advanced Print and Paper*3 Credits*

Self-directed study in printmaking and papermaking processes. Offered spring semester. Prerequisite(s): ART 3301 or ART 379 or ART 3311 or ART 377 or ART 375 or ART 385. This course may be repeated 2 times. Course Attributes: Fine Arts.

ART 4401 - Advanced Ceramics*3 Credits*

Directed study. Offered fall and spring semesters. Prerequisite(s): ART 3401. This course may be repeated 2 times. Course Attributes: Fine Arts.

ART 4501 - Advanced Sculpture*3 Credits*

Directed study. Offered fall and spring semesters. Prerequisite(s): ART 3501 or (ART 360 and ART 370) or ART 3511 or ART 365. This course may be repeated 2 times. Course Attributes: Fine Arts.

ART 4691 - Seminar in Art and Design*1 to 3 Credits*

May repeat as topic varies. This course may be repeated 4 times.

ART 4801 - Advanced Book Arts*3 Credits*

Relationship between the book, text and image through narrative, pacing, and techniques in illustration, drawing and printmaking. Traditional and non-traditional applications utilized. May repeat to 6 credits. Offered spring semester. Prerequisite(s): ART 2801. This course may be repeated 2 times. Course Attributes: Fine Arts.

ART 4901 - Senior Capstone in Art 1*3 Credits*

Yearlong investigative project that synthesizes liberal arts and major learning objectives. Offered fall semester. Course Attributes: Fine Arts.

ART 4911 - Senior Capstone in Art 2*3 Credits*

Culmination and presentation of demonstrated knowledge of practices, methods, theories, concepts, and issues. Offered spring semester. Prerequisite(s): ART 4901 Minimum Grade of C. Course Attributes: Fine Arts, Critical and Creative Thinking, Effective Communication Non-Writing, Effective Communication Writing.

ART 4921 - Externship*1 to 3 Credits*

Supervised field experience in an approved studio, agency, firm, department, museum, university, arts organization, or non-profit. International or domestic study may count toward requirement with department authorization. Formal presentation to department required after completion. Offered fall and spring semesters. This course is repeatable for a total of 9 hours. Course Attributes: Requires Instructor Approval.

ART 4981 - Independent Study in Art*1 to 3 Credits*

May repeat as topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

ART 4991 - Special Topics in Art and Design*1 to 3 Credits*

May repeat as topic varies. This course may be repeated 2 times.

Subject - Design (DSGN)**DSGN 1101 - Photography and Communication***3 Credits*

Communication in the context of image creation; composition and technical skills through aesthetics and style. Methods in concept, image and form development, presentation formats, sequence and narrative. Offered spring semester. Course Attributes: Fine Arts.

DSGN 1201 - Introductory Visual Communication Design*3 Credits*

Basic methods, processes, language, composition and theory of working in two-dimensional communication design. Emphasis on problem analysis, creative concept development, analytical and technical skills. Offered fall semester. Course Attributes: Fine Arts, Critical and Creative Thinking, Effective Communication Non-Writing.

DSGN 1301 - Typography*3 Credits*

Examines typographic changes brought about through cultural, political and sociological influences; language theories; and technological development. Integrates lessons from the past with contemporary theory and technology. Lectures based on four language components: letter and word, sentence and meaning, language and structure, text and textuality. Offered fall semester. Course Attributes: Fine Arts.

DSGN 1981 - Special Topics in Design*1 Credit Grading mode is S/U*

Topics in design. Enrollment restricted to attendees of the Summer Honors Institute. May repeat as topic varies. This course may be repeated 3 times.

DSGN 1991 - Special Topics in Design*1 to 3 Credits*

May repeat as topic varies. This course may be repeated 2 times.

DSGN 2101 - Advanced Photography and Communication*3 Credits*

Visual language in context of form, content and meaning; aesthetics and style; sequence and narrative. Offered spring semester. Prerequisite(s): DSGN 1101 or ART 240. This course may be repeated 1 time. Course Attributes: Fine Arts.

DSGN 2401 - Narrative Structures*3 Credits*

Design thinking and the exploration of the nature and practice of visual communication as a story-telling and framing activity in print media. Emphasis on research, concept development and technical skills. Offered spring semester. Prerequisite(s): DSGN 1301 or ART 223. Course Attributes: Fine Arts.

DSGN 2601 - Design Research Methods*3 Credits*

Research design, gathering, analysis, application and presentation of information for graphic designers. Emphasis on role of research in problem solving process, from initial client intake, to problem definition, design requirements, screening, selection and refinement, to implementation and postproject evaluation. Offered alternate fall semesters. Course Attributes: Fine Arts.

DSGN 2651 - History of Graphic Design*3 Credits*

Events, ideas, movements, artifacts and designers that have historical significance and influence on contemporary graphic design and the profession. Exploration of the role of design in society and the nature, influence and impact of changing design methods, materials, technologies, theories and values. Offered alternate fall semesters. Course Attributes: Fine Arts.

DSGN 2801 - Design for Social Change*3 Credits*

Design thinking and the examination of historical, cultural, political or environmental relationships as it pertains to the ways in which design can improve our world. May repeat as topic varies. Offered alternate spring semesters. This course may be repeated 2 times. Course Attributes: Fine Arts.

DSGN 2991 - Special Topics in Design*1 to 3 Credits*

May repeat as topic varies. This course may be repeated 2 times.

DSGN 3401 - Packaging and Identity Design*3 Credits*

Investigation of comprehensive applied problems in visual communication addressing design identity, branding programs and consumer-oriented design. Offered fall semester. Prerequisite(s): DSGN 1301 or ART 340. Course Attributes: Fine Arts.

DSGN 3501 - Persuasive Design*3 Credits*

Examination of form, content and context that shape persuasive communication including commercial, political and social contexts; persuasive strategies, critical techniques and ethical issues in shaping design. Offered spring semester. Prerequisite(s): DSGN 2401 or ART 341. Course Attributes: Fine Arts.

DSGN 3551 - Advertising Design 1*3 Credits*

Form and content that shape communication branding strategies in advertising design. Examination of concept development, the psychology of effective visual messages and the creative, intelligent, emotional and persuasive writing/images of ad campaigns. Offered alternate spring semesters. Prerequisite(s): DSGN 2401 or ART 340. Course Attributes: Fine Arts.

DSGN 3561 - Advertising Design 2*3 Credits*

Design thinking of integrated communications into media, three-dimensional artifacts and campaigns as an extension of brand experience and strategic solutions. Offered alternate spring semesters. Prerequisite(s): DSGN 2401. Course Attributes: Fine Arts.

DSGN 3701 - Visual Interface Design*3 Credits*

Communication design of visual interfaces and the analytical behavioral, cognitive and linguistic dimensions of designing for dynamic information environments. May repeat to 6 credits. Offered fall semester. Prerequisite(s): DSGN 1301 or ART 340. This course is repeatable for a total of 3 hours. Course Attributes: Fine Arts.

DSGN 3751 - Interactive Design and Identity*3 Credits*

Design thinking and processes in the context of e-commerce, branding and identity, usability and hierarchical form. May repeat to 6 credits. Offered spring semester. Prerequisite(s): DSGN 1301 or ART 341. This course is repeatable for a total of 3 hours. Course Attributes: Fine Arts.

DSGN 3991 - Special Topics in Design*1 to 3 Credits*

May repeat as topic varies. This course may be repeated 2 times.

DSGN 4201 - Advanced Visual Communication Design*3 Credits*

Design thinking and processes in the context of transformation design; interdisciplinary design issues addressed as a means of participation, response, adaptation and innovation beyond traditional design solutions to create fundamental change. May repeat as topic varies. Offered spring semester. Prerequisite(s): DSGN 3501 or ART 440. This course may be repeated 2 times. Course Attributes: Fine Arts.

DSGN 4601 - Professional Practices in Design*3 Credits*

In-house design and project management issues with emphasis on collaborative communication problem-solving, designer/client relationships, research strategies, legal issues, production methods and ethics in design. Offered fall semester. This course may be repeated 2 times. Course Attributes: Fine Arts.

DSGN 4691 - Seminar in Design*1 to 3 Credits*

May repeat as topic varies. This course may be repeated 4 times.

DSGN 4901 - Senior Capstone in Design 1*3 Credits*

Yearlong investigative project that synthesizes liberal arts and departments learning objectives. Offered fall semester. Course Attributes: Fine Arts.

DSGN 4911 - Senior Capstone in Design 2*3 Credits*

Culmination and presentation of demonstrated knowledge of practices, methods, theories, concepts, and issues. Offered spring semester. Prerequisite(s): DSGN 4901 Minimum Grade of C. Course Attributes: Fine Arts, Critical and Creative Thinking, Effective Communication Non-Writing, Effective Communication Writing.

DSGN 4921 - Internship*1 to 3 Credits*

Supervised field experience in an approved commercial studio, agency, firm, department, museum, gallery, arts organization, or non-profit. Approval of department required prior to registration. Formal presentation to department required after completion. May repeat, but only 12 credits count toward graduation. Offered fall and spring semesters. This course is repeatable for a total of 11 hours. Course Attributes: Requires Instructor Approval.

DSGN 4981 - Independent Study in Design*1 to 3 Credits*

May repeat as topic varies. Unlimited repeats permitted.

DSGN 4991 - Special Topics in Design*1 to 3 Credits*

May repeat as topic varies. This course may be repeated 2 times.

DEPARTMENT OF BIOLOGICAL AND ALLIED HEALTH SCIENCES

Professors Anderson, Aulthouse, Verb, L. Young; **Associate Professors** De Luca, Keas (*Interim Chair*), Mager, Riley, Suniga; **Assistant Professors** Connour, McAfee, Motz, Sanford; **Medical Laboratory Science Program Director & Clinical Assistant Professor** Walden; **Laboratory Instructor** Graytock; **Laboratory Technician** Brachok; **Adjunct Faculty** Adkins, Casey, Collene, Haase, Kuk, Leland, Rhode, Sargeant, Sherrick, Sreenan.

Mission Statement

The department provides a dynamic educational environment in which students learn, investigate, and apply knowledge in their chosen discipline within the biological and allied health sciences, preparing them to become ethical and competent professionals.

Vision Statement

The department is committed to the continuous integration of academic excellence with professional and personal development of students. Accordingly, the faculty will foster and empower student achievement through scholarship and participation in the classroom and experiential activities using innovative approaches, which will prepare them to become accomplished professionals.

Overview

The department offers five majors and four minors with student-centered instruction focused on high impact learning opportunities. The department offers research, internship, study abroad and experiential opportunities appropriate to student's career goals. Special programs are offered in the premedical sciences and teaching licensure.

Accreditation

The Life Sciences and Integrated Science licensure programs are approved by the state of Ohio. The Teacher Education Program is accredited by the National Council for Accreditation of Teacher Education (NCATE).

Ohio Northern University's West Central Ohio Medical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Rd., Suite 720, Rosemont, IL 60018-5119.

Majors, Minors and Degrees Offered

Biology Major (BS)
Environmental and Field Biology Major (BS)
Forensic Biology Major (BS)
Medical Laboratory Science (BSMLS)
Molecular Biology Major (BS)
Biology Minor
Biomedical Sciences Minor
Environmental Studies Minor
Public Health Minor

Certification and Licensure Offered

Medical Laboratory Science Post-Baccalaureate Certificate

- Adolescent Young Adult (7-12) Integrated Science Licensure
- Adolescent Young Adult (7-12) Life Sciences Licensure

*Information about ONU's West Central Ohio Medical Laboratory Science Program can be found on page 52.

Special Programs

Pre-professional Medical Sciences

Qualified students can pursue pre-professional education in the following medical science fields: pre-dentistry, pre-medicine, pre-occupational therapy, pre-optometry, pre-physical therapy, pre-physician assistant and pre-veterinary medicine.

Dual Degrees Program

The pharmacy/biology dual degrees program is a six-year curriculum that provides for education, practice and research experiences in both pharmacy and biology. The Doctor of Pharmacy degree and the Bachelor of Science in biology degree are awarded upon completion of the program of study. A more detailed description about this program is available from the Department of Biological and Allied Health Sciences and from the College of Pharmacy. **This program is available to pharmacy (Pharm.D) students.**

Internships

BIOL 4921

The 400-hour senior status internship provides an off-campus practical experience in areas of the biological sciences. Examples include state and federal forensic laboratories, hospital and technical health programs, laboratory research, toxic waste management, environmental consulting, zoo animal care and management, wildlife and fisheries management. Before embarking on an internship, students must complete at least three years of course work in biology and related areas. The internship must be approved by the capstone committee and faculty of the department prior to registration. Internships credit hours are from 1 to 12, only 4 credit hours will count towards the major.

Cooperative Education Experience

BIOL 3401

Co-op students earn professional experience in a biologically- or environmentally-related occupation with a governmental, consulting or industrial entity that interacts with professional scientists in an employer-employee context. The normal undergraduate career of students choosing the Co-op program is five years rather than the four. Co-op program students may spend a total of two semesters of employee/intern activity with the Co-op agency. These Co-op activities will be interspersed with regular academic terms on campus enrolled as full-time students. Junior status and approval of the capstone committee and department chair is required for participation in the Co-op program.

Study Abroad

The department has specific study abroad agreements with the University of Eastern Finland (Joensuu, Finland). Others can be arranged. The study abroad experience must be approved by the capstone committee and the department to be used as a student's capstone course work.

Off-campus Facilities

The department utilizes for experiential learning and biological surveys the 300-acre Tidd-Oakes Wetland Restoration Project bordering the Scioto River and Scioto Marsh twelve miles from the campus. The glaciated, former farm land has an on-site field station and is used for laboratory courses and research in biology.

The ONU Metzger Nature Center, a 70-acre property in Tuscarawas County, OH, serves as a biology field station. The facility is located near Ragersville and includes a century-old farm house and a modern 8,500 square foot academic, classroom, laboratory and residence center. The hills, valleys, woods, fields, stream and pond provide an excellent opportunity for teaching, study and research in the non-glaciated region of Ohio.

Major Course Requirements

All required courses in the major subject area must be completed with a grade of "C" or higher. Forensic Biology majors are required to show proof of membership in a professional organization each year. The ETS Major Field Test (MFT) in biology is required of all majors during their senior year. Credit will not be granted for both BIOL 2311 and 3241 or 3311 or for BIOL 2321 and 3251 or 3321.

Biology Major

Aside from the requirements below each student's curriculum is open to meet the requirements of their goals, including graduate or professional school, and teacher licensure. Academic advisor's guide students in meeting their goals. To receive a B.S. degree, a student must complete 47-49 credit hours of biology course that include the following:

BIOL 1951	Biology Orientation (1)
BIOL 1311	Biology 1: Cells and Molecules (4)
BIOL 1321	Biology 2: Organismal Biology (4)
BIOL 2001	Biology 3: Diversity of Life (4)
BIOL 4921	Capstone Experience ¹ (1-6)
BIOL 4941	Capstone Seminar (2)

Eighteen (18) credit hours of biology electives from 2000 to 4000 level courses.

Other required courses

Two non-remedial courses in chemistry totaling eight to ten (8-10) credit hours.

Two non-remedial courses in mathematics and/or statistics totaling six (6) credit hours.

¹Capstone Experience must be approved by the department and may be a research (REU) experience, an internship, study abroad, a co-op, or another approved experience.

Biology Major-Adolescent Young Adult (7-12) Life Sciences Licensure

This option is available to students majoring in biology (see above requirements for biology major). All courses required for the licensure must be completed with a grade of "C" or higher.

BIOL 1951	Orientation (1)
BIOL 1311	Biology 1: Cells and Molecules (4)
BIOL 1321	Biology 2: Organismal Biology (4)
BIOL 2001	Biology 3: Diversity of Life (4)
BIOL 2041	Systematic Plant Survey (3)
BIOL 2101	Genetics (4)

BIOL 2231 Invertebrate Zoology (3)
 BIOL 2511 Ecology (4)
 BIOL 3511 Cell Biology (3)
 1 course of the following: BIOL 2311, 3011, 3021, or 3241
 BIOL 4921 Capstone Experience (1-3)
 BIOL 4941 Capstone Seminar (1)
 CHEM 1711 General Chemistry 1 (5)
 CHEM 1721 General Chemistry 2 (5)
 GEOL 2801 Geology (3)
 PHYS 1051 Planetary Astronomy (3)
 PHYS 1001 Conceptual Physics (3)
 PHYS 2111 General Physics 1 (3)
 PHYS 2341 Physics Laboratory 1 (1)
 PHYS 2121 General Physics 2 (3)
 PHYS 2351 Physics Laboratory 2 (1)

2 courses from the following:
 STAT 1561, 2561; MATH 1251, 1401, 1431,
 MATH 1461, 1471, 1631, 1641

Additional requirements (47 credit hours)
 EDUC 1151 Culture and Schooling (3)
 EDUC 2101 Exceptional Learner (3)
 EDUC 2681 Curriculum and Assessment (3)
 EDUC 3201 Instructional Media and Educational Technologies (3)
 EDUC 3451 Literacy in the Content Areas AYA/MA (3)
 EDUC 4401 Educational Psychology (3)
 EDUC 4451 Leadership Seminar in Education (2)
 EDUC 4511 Integrated Science Methods (3)
 EDUC 4721 Student Teaching Adolescent Young Adults (12)

Specified general education courses
 CAMS 1311 Communication In the Classroom (3)
 PSYC 1001 Psychology (3)
 PSYC 2171 Adolescent Psychology (3)

Adolescent Young Adult (7-12) Integrated Sciences Licensure This option is available to students majoring in biology, chemistry or physics and allows students to teach classes in Biology, Chemistry, Physics, and/or Earth Sciences. Students must complete additional hours in science courses outside the major for this licensure. All courses required for the licensure must be completed with a grade of "C" or higher.

BIOL 1951 Orientation (1)
 BIOL 1311 Biology 1: Cells and Molecules (4)
 BIOL 1321 Biology 2: Organismal Biology (4)
 BIOL 2001 Biology 3: Diversity of Life (4)
 BIOL 2041 Systematic Plant Survey (3)
 BIOL 2101 Genetics (4)
 BIOL 2231 Invertebrate Zoology (3)
 BIOL 2511 Ecology (4)
 BIOL 3111 Microbiology (4)
 1 course of the following: BIOL 2311, 3011, 3021, or 3241
 BIOL 4921 Capstone Experience (1-3)
 BIOL 4941 Capstone Seminar (1)
 Plus

CHEM 1711 General Chemistry 1 (5)
 CHEM 1721 General Chemistry 2 (5)
 CHEM 2511 and 2521 Organic Chemistry 1, 2
 CHEM 2551 and 2561 Organic Chemistry Labs 1, 2
 GEOL 2801 Geology (3)
 PHYS 1051 Planetary Astronomy (3)
 PHYS 2111 General Physics 1 (3)
 PHYS 2341 Physics Laboratory 1 (1)
 PHYS 2121 General Physics 2 (3)
 PHYS 2351 Physics Laboratory 2 (1)
 PHYS 3011 Advanced Physics Research Lab (2)
 PHYS 3051 Modern Physics (3)
 MATH 1631 Calculus 1 (4)
 MATH 1641 Calculus 2 (4)
 STAT 1561 Statistics for Professionals 1 (3)
 Plus
 EDUC 1151 Culture and Schooling (3) (20 hours field)
 EDUC 2101 Exceptional Learner (3) (20 hours field)
 EDUC 2681 Curriculum and Assessment (3) (20 hours field)
 EDUC 3201 Instructional Media and Educational Technologies (3)
 EDUC 3451 Literacy in the Content Areas AYA/MA (3) (20 hours field)
 EDUC 4401 Educational Psychology (3) (20 hours field)

EDUC 4451 Leadership Seminar in Education (2)
 EDUC 4511 Integrated Science Methods (3) (20 hours field)
 EDUC 4721 Student Teaching Adolescent Young Adults (12)

Specified general education courses
 CAMS 1311 Communication In the Classroom (3)
 PSYC 1001 Psychology (3)
 PSYC 2171 Adolescent Psychology (3)

Environmental and Field Biology Major

BS Degree Requirements (63-65 credit hours)

BIOL 1951 Biology Orientation (1)
 BIOL 1311 Biology 1: Cells and Molecules (4)
 BIOL 1321 Biology 2: Organismal Biology (4)
 BIOL 2001 Biology 3: Diversity of Life (4)
 BIOL 2131 Natural History (2)
 BIOL 2511 Ecology (4)
 BIOL 4921 Capstone Experience¹ (1-6)
 BIOL 4941 Capstone Seminar (1)

The Field Semester

The field semester consists of the following five courses taken concurrently by the student in the fall semester of the junior year. Failure of any of these courses may be remedied by passing additional substitute course(s) approved by the department.

BIOL 3661 Environmental Research Methods (3)
 BIOL 3671 Field Botany (3)
 BIOL 3681 Ichthyology (3)
 BIOL 3691 Field Invertebrate Biology (3)
 BIOL 3701 Marine Biology (3)

Specified General Education Classes

PHIL 3101 Environmental Ethics (3)
 PLSC 3061 Environmental Law (3)
 GEOG 2481 Intro to G.I.S. (3)

Two non-remedial courses in chemistry totaling eight to ten (8-10) credit hours.

Two non-remedial courses in mathematics and/or statistics totaling six (6) credit hours.

One non-remedial course in physics with a lab or complete the two following courses.

GEOL 2801 Geology (3)
 GEOL 2811 Lab for Geology 2801 (1)

¹Capstone Experience must be approved by the department and may be an off-campus research (REU) experience, an internship, study abroad, a co-op, or another approved experience.

Forensic Biology Major

The forensic biology major provides students with a solid foundation in the forensic sciences through a core of forensic biology courses and, through upper-level forensic courses, provides a focused and coherent study in the practice of the scientific techniques used to analyze physical evidence found at the scene of a crime. All required courses must be completed with a grade of "C" or higher.

BS Degree Requirements (105 credit hours)

BIOL 1951 Biology Orientation (1)
 BIOL 1311 Biology 1: Cells and Molecules (4)
 BIOL 1321 Biology 2: Organismal Biology (4)
 BIOL 2101 Genetics (4)
 BIOL 2171 Molecular Biology (3)
 BIOL 2191 Forensic Biology 1 (4)
 BIOL 2291 Forensic Biology 2 (4)
 BIOL 2311 Anatomy and Physiology 1 (3)
 BIOL 2591 Crime Scene Investigation (4)
 BIOL 2691 Forensics Computer Analysis (4)
 BIOL 3191 Forensic Microscopy (4)
 BIOL 3291 Forensic Physical Methods (4)
 BIOL 3521 Cell and Molecular Biology Lab (2)
 BIOL 3571 Forensics DNA Analysis (4)
 BIOL 4921 Capstone Experience¹ (1-3)
 BIOL 4941 Capstone Seminar (1)

Other required courses

CHEM 1711	General Chemistry 1 (5)
CHEM 1721	General Chemistry 2 (5)
CHEM 2311	Analytical Chemistry 1 (4)
CHEM 2511	Organic Chemistry 1 (3)
CHEM 2521	Organic Chemistry 2 (3)
CHEM 2551	Organic Chemistry Lab 1 (1)
CHEM 2561	Organic Chemistry Lab 2 (1)
CHEM 3111	Biochemistry (3)
CHEM 3151	Biochemistry Lab (1)
CAMS 1301	Presentational Speaking (3)
MATH 1461	Calculus for Life Sciences (3)
PHYS 2111	Physics 1 (3)
PHYS 2121	Physics 2 (3)
PHYS 2341	Physics Lab 1 (1)
PHYS 2351	Physics Lab 2 (1)
CJ 1211	Intro to Criminal Justice (3)
SOC 2611	Criminology (3)
STAT 1561	Statistics for Professionals 1 (3)

¹Capstone Experience is an approved Forensic Biology Internship that is completed prior to the Capstone Seminar (BIOL 4941).

Molecular Biology Major

The molecular biology major provides the classroom and laboratory training necessary for students to pursue careers in the biotechnology industry, biomedical research and for preparation for graduate and medical school. All required courses must be completed with a grade of "C" or higher.

BS Degree Requirements (70 credit hours)

BIOL 1951	Biology Orientation (1)
BIOL 1311	Biology 1: Cells and Molecules (4)
BIOL 1321	Biology 2: Organismal Biology (4)
BIOL 2001	Biology 3: Diversity of Life (4)
BIOL 2101	Genetics (4)
BIOL 2171	Molecular Biology (3)
BIOL 3511	Cell Biology (3)
BIOL 3521	Cell and Molecular Lab (2)
BIOL 3111	Microbiology (4)
BIOL 4511	Advanced Topics in Cell Biology (2)
BIOL 4921	Capstone Experience ¹ (1)
BIOL 4941	Capstone Seminar (2)

¹Capstone Experience must be a research experience approved by the department.

Other required courses

CHEM 1711	General Chemistry 1 (5)
CHEM 1721	General Chemistry 2 (5)
CHEM 2511	Organic Chemistry 1 (3)
CHEM 2521	Organic Chemistry 2 (3)
CHEM 2551	Organic Chemistry Lab 1 (1)
CHEM 2561	Organic Chemistry Lab 2 (1)
CHEM 3111	Biochemistry (3)
CHEM 3151	Biochemistry Lab 1 (1)

Two non-remedial courses in mathematics and/or statistics totaling six (6) credit hours.

Criminal Justice (Forensics) Option (28 credit hours) The criminal justice (forensic science) option is for students majoring in biology or molecular biology. Students will deal with various aspects of the scientific side of crime scenes and investigations. The list of courses provides the student with the minimal required course work to fulfill the guidelines set forth by the FBI to become a DNA analyst in Forensic DNA and Convicted Offender Laboratories. The criminal justice (forensic) option is not available to students with a major in forensic biology.

Additional Requirements (38 credit hours)

BIOL 2101	Genetics (4)
BIOL 2171	Molecular (3)
BIOL 2191	Forensic Biology (4)
BIOL 3521	Cell and Molecular Biology Lab (2)

Other required courses

CHEM 1711	General Chemistry 1 (5)
CHEM 1721	General Chemistry 2 (5)
CHEM 2511	Organic Chemistry 1 (3)
CHEM 2521	Organic Chemistry 2 (3)
CHEM 2551	Organic Chemistry Lab 1 (1)
CHEM 2561	Organic Chemistry Lab 2 (1)
CHEM 3111	Biochemistry (3)
CHEM 3151	Biochemistry Lab (1)
CJ 1211	Introduction to Criminal Justice (3)

Minor Course Requirements

Students majoring in biology who choose to add a minor within the department (e.g. environmental studies) must take an additional 8 hours in BIOL courses beyond the requirements of the minor.

Students in majors outside of the Department of Biological and Allied Health Sciences may complete two minors from within the department by taking all required courses for each of the minors plus eight additional hours of BIOL courses.

Biology Minor (20 credit hours)

The minor in biology is available only to students in majors outside of the Department of Biological and Allied Health Sciences.

BIOL 1311	Biology 1: Cells and Molecules (4)
BIOL 1321	Biology 2: Organismal Biology (4)
BIOL 2001	Biology 3: Diversity of Life (4)

Eight (8) credit hours of biology electives from 2000 to 4000 level courses.

Two non-remedial courses in chemistry, geology or physics with a lab totaling eight (8) credit hours.

Biomedical Sciences Minor (22-24 credit hours)

BIOL 1311	Biology 1: Cells and Molecules (4)
BIOL 1321	Biology 2: Organismal Biology (4)
BIOL 1351	Human Anatomy and Histology (4)

Select one of the following two-course sequences:

BIOL 2311	Anatomy and Physiology 1 (3)
BIOL 2321	Anatomy and Physiology 2 (3)

or

BIOL 3241	Medical Physiology 1 (4)
BIOL 3251	Medical Physiology 2 (4)

*Credit cannot be received for both BIOL 3241/3251 and BIOL 2311/2321

Select one:

BIOL 3011	Developmental Anatomy (4)
BIOL 3021	Human Anatomy (4)
BIOL 3031	Histology (4)

Two non-remedial courses in chemistry, or physics with labs totaling eight (8) credit hours.

Environmental Studies Minor (23 credit hours)

Students majoring in environmental and field biology may not minor in environmental studies.

BIOL 1311	Biology 1: Cells and Molecules (4)
BIOL 1321	Biology 2: Organismal Biology (4)
BIOL 2001	Biology 3: Diversity of Life (4)
BIOL 2011	Environmental Issues (3)
BIOL 2131	Natural History (2)
PHIL 3101	Environmental Ethics (3)
PLSC 3061	Environmental Law (3)

Two non-remedial courses in chemistry, geology or physics with a lab totaling eight (8) credit hours.

Public Health Minor (31-32 credit hours)

The minor in public health is designed to prepare students for careers in health education, disease prevention and control and health promotion by acquainting them with major public health issues.

One year of introductory biology (8)
 BIOL 2011 Environmental Issues (3)
 BIOL 2101 Genetics (4)
 BIOL 2551 Epidemiology (3)
 PLUS one Microbiology course (BIOL 3111, 3131) (3/4)
 PHPR 2511 Preventive Medicine (3)
 STAT 1561 Statistics for Professional 1 (3)

Plus two courses from this list:

Two courses from this list:

BIOL 2511 Ecology (4)
 BIOL 3011 Developmental Anatomy (3)
 BIOL 3051 Environmental Toxicology(3)
 BIOL 3151 Medical Terminology (1)
 BIOL 3541 Bioinformatics (4)
 BIOL 3621 Parasitology (3)
 CE 3631 Water Resources (3)
 CE 3711 Urban Planning (3)
 GEOG 2481 Intro to G.I.S. (3)
 GEOG 2261 World Geography (3)
 HLED 1101 Personal Health Problems (3)
 HLED 1201 School & Community Health (2)
 HLED 2101 AIDS and other STDs (3)
 PHBS 3501 Nutrition (2)
 PHBS 3751 Immunology (3)
 PHBU 4121 Health Care Management (3)
 PHIL 1021 Philosophy of Science (3)
 PHIL 1051 Ethics, Justice and Law (3)
 PHIL 2401 Professional Ethics (3)
 PHIL 3101 Environmental Ethics (3)
 PLSC 3661 Public Administration (3)
 LAW 1582 Law & Medical Ethics (3)
 STAT 2561 Statistics for Professional 2 (3)

Plus two non-remedial courses in chemistry, geology or physics with a lab totaling eight (8) credit hours.

West Central Ohio Medical Laboratory Science Program

The West Central Ohio Medical Laboratory Science (WCOMLS) Program is a full-year (12 months) clinical training experience for those pursuing the BSMLS degree or the post-baccalaureate certificate. During the first two semesters, students complete didactic coursework in medical laboratory science theory and practice, hematology, clinical chemistry, clinical microbiology, clinical immunology, immuno-hematology, biological fluids, professional practice and development. The students complete their last semester of clinical coursework at an assigned clinical affiliate that may include Lima Memorial Hospital.

Graduates and those who complete the certificate may pursue career opportunities in various laboratory settings including clinical, industrial and public health or choose to continue their education in graduate school.

Mission Statement

The mission of the WCOMLS Program is to educate students in the medical laboratory sciences, preparing them to practice as ethical and competent professionals and enabling them to meet whatever job-related challenges arise now and in the future.

Accreditation

Ohio Northern University's West Central Ohio Medical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Rd., Suite 720, Rosemont, IL 60018-5119.

Admission Requirements

The WCOMLS Program has an enrollment capacity of eight students per year. The start date for the program is the first day of summer term. Prospective students may submit applications at any time but not later than March 1 of the year for which an applicant seeks program admission. Applicants completing prerequisite coursework at the time of application may be considered for admission but, if selected (provisional admit), will be required to submit documentation (transcript or original grade report) of successful completion of the course(s) prior to the first day of class. Applicants selected for admission for a given year are notified by the Program Director by April 1 of that year. Admission to the program is competitive, based on enrollment capacity and admission standards.

At a minimum, BSMLS applicants to the WCOMLS Program must do the following:

- Submit a completed application for admission (only completed applications are considered) by March 1
- Satisfy all applicable university and college requirements for graduation
- Satisfy all applicable degree requirements excluding MLS coursework
- Complete all prerequisite coursework with a minimum of a "C" in each course
- Demonstrate a minimum of 2.80 GPA with a minimum 3.00 science (biology, chemistry, mathematics, physics) GPA on a 4.00 scale
- Demonstrate comprehension and commitment to MLS professionalism

At a minimum, non-degree seeking (Post-Baccalaureate Certificate) applicants to the WCOMLS Program must meet the following requirements:

- Submit a completed application for admission (only completed applications are considered) by March 1
- Satisfy all applicable university and college requirements for admission as a non-degree seeking student
- Possess a baccalaureate degree from an accredited college or university
- Have completed 16 semester hours (or equivalent quarter hours) of biology coursework that must include a microbiology course with laboratory, human anatomy and physiology, genetics and molecular biology
- Have completed 16 semester hours (or equivalent quarter hours) of chemistry including biochemistry or organic chemistry
- Have completed 5 semester hours (or equivalent quarter hours) of college-level mathematics including one course in statistics
- Demonstrate a minimum 2.80 cumulative GPA with a minimum 3.00 science (biology, chemistry, mathematics, physics) GPA on a 4.00 scale
- Demonstrate comprehension and commitment to MLS professionalism

Application packets are available from the WCOMLS Program Office, Meyer Hall 166.

Medical Laboratory Science Major

The BSMLS degree coursework centers on student learning and professional development using a community-partnered curriculum. Students are expected to complete all degree requirements including (a) a minimum of 35 semester hours of approved general education coursework, (b) a minimum of 37 semester hours of biology requisites, (c) a minimum of 18 semester hours of chemistry requisites, (d) participation in the college assessment program, and (e) a minimum of 51 semester hours of medical laboratory science core coursework. Students are encouraged to include recommended science electives as time and scheduling permit. The last year of study requires that students apply for admission to and complete the clinical training program. Students admitted to the program continue their didactic coursework in the Department of Biological and Allied Health Sciences and complete clinical training at an area clinical affiliate. Full-time students can complete the degree in nine semesters (i.e. four years plus one summer).

Students who successfully complete all degree requirements are awarded a BS in Medical Laboratory Science and are eligible to seek professional certification from the American Society for Clinical Pathology (ASCP).

Major Course Requirements

Students are required to have a minimum 2.00 cumulative GPA in all general education, biology core, and chemistry courses. All MLS courses must be completed with a grade of "C" or higher.

BSMLS Degree Requirements (104 credit hours)

BIOL 1951 Biology Orientation (1)
 BIOL 1311 Biology 1: Cells and Molecules (4)
 BIOL 1321 Biology 2: Organismal Biology (4)
 BIOL 2101 Introductory Genetics (4)
 BIOL 2311 Anatomy and Physiology 1 (3)
 BIOL 2321 Anatomy and Physiology 2 (3)
 BIOL 3031 Histology (4)
 BIOL 3111 Introduction to Microbiology (4)
 BIOL 3431 Histological Techniques (3)
 BIOL 3521 Cell and Molecular Biology Lab (2)

BIOL 2171	Molecular Biology (3) or
BIOL 3511	Cell Biology (3)
MLS core courses ¹	
BIOL 4621	Biological Fluids (3)
BIOL 4631	Clinical Immunology (3)
BIOL 4641	Hematology and Hemostasis (4)
BIOL 4671	Diagnostic Microbiology (4)
MLS 4601	Foundations of Clinical Laboratory Science (3)
MLS 4611	Professional Practice and Development (3)
MLS 4651	Blood Banking and Transfusion Science (4)
MLS 4661	Clinical Chemistry (4)
MLS 4681	Clinical Laboratory Practicum (2)
MLS 4691	Clinical Hematology Practicum (4)
MLS 4701	Blood Bank Practicum (4)
MLS 4711	Clinical Chemistry Practicum (4)
MLS 4721	Clinical Microbiology Practicum (4)
MLS 4731	Immunology and Infectious Disease Practicum (2)
MLS 4741	Case Studies in Medical Lab Science (1)
MLS 4921	Capstone Experience (1)
MLS 4941	Capstone Seminar (1)

Other required courses

CHEM 1711	General Chemistry 1 (5)
CHEM 1721	General Chemistry 2 (5)
CHEM 2511	Organic Chemistry 1 (3)
CHEM 2521	Organic Chemistry 2 (3)
CHEM 2551	Organic Chemistry Lab 1 (1)
CHEM 2561	Organic Chemistry Lab 2 (1)

¹MLS core courses are the requirement for the Post-Baccalaureate Certificate in MLS.

Essential Functions

Essential functions are nonacademic standards that all WCOMLS Program students must master and execute successfully to participate in and complete the program without compromising the safety and the well-being of students, instructors, and patients and the public. The WCOMLS program essential functions require that a student do the following:

1. Identify and differentiate physical features, including color, shape and size of microscopically viewed materials.
2. Identify, discriminate and characterize the physical attributes (e.g., color, odor, consistency) of biological samples, reagents and end points of chemical reactions.
3. Read numbers, letters and symbols displayed in print whether transmitted through non-electronic or other technological media.
4. Identify and respond to warning signals.
5. Demonstrate dexterity to perform analyses in accordance with established laboratory protocols and to manipulate laboratory utensils, tools, equipment and instrumentation, including computer touch-screens, keyboards and handheld calculators.
6. Engage in a sustained physical activity that may require sitting, standing or walking for extended periods of time.
7. Practice laboratory safety and respond to emergent situations in accordance with established guidelines to minimize harm and danger to self and others.
8. Exercise range of motion and reach to work in laboratory facilities, to assist patients who may be seated, prone or standing and to manipulate sample containers, lab utensils, tools, equipment and instrumentation without threatening harm or violating safety protocols.
9. Use available modes of transportation to travel between the university campus and off-campus training sites.
10. Collect specimens in a safe, timely and professional manner without compromising sample integrity or causing the patient undue pain and suffering.
11. Ask appropriate scientific questions and demonstrate ability to evaluate and draw conclusions.
12. Organize and communicate results obtained by observation and experimentation in oral and written form under conditions of stress or calm and within given time constraints.
13. Identify and employ strategies that minimize miscommunication.
14. Adhere to established policies to safeguard confidentiality of information communicated by non-electronic and electronic means.
15. Perform multiple tasks with focused attention on safety, accuracy and quality.

16. Communicate tactfully, respectfully and regardless of the intended audience's race, color, creed, religion, sex, age, handicap, veteran status or national origin.
17. At all times and in all circumstances, maintain a professional demeanor and perform every task assignment with focused attention on safety, accuracy and quality.
18. Speak, act and perform assigned tasks in an ethical manner.
19. Recognize and work within the limits of personal abilities, ask for help when required and actively participate in opportunities to improve.
20. Engage in actions that support team workmanship and minimize conflict.
21. Work collaboratively and independently, demonstrating knowledge and mastery of skills when speaking, writing or taking examinations.

Medical Laboratory Science Post-Baccalaureate Certificate

The ONU post-baccalaureate certificate in MLS focuses on educating academically qualified individuals in the medical laboratory sciences using a community-partnered curriculum. Specifically, students must complete a minimum of 51 semester hours of clinical laboratory science core coursework including the supervised applied clinical experience.

Post-Baccalaureate Certificate Requirements

See the list of MLS core courses on page 52. All MLS core courses must be completed with a grade of "C" or higher.

Essential Functions

See the list of Essential Functions above.

Subject - Biological Sciences (BIOL)

BIOL 1031 - Life and Earth Sciences for Early and Middle Childhood Education Majors

3 Credits

Diversity, evolution, ecology, cell biology, inheritance and earth science as they affect and have affected life on earth. A Nature Center use fee and lab fee are charged. DOES NOT SATISFY ANY REQUIREMENTS FOR THE MAJOR IN BIOLOGY, CLINICAL LABORATORY SCIENCE, ENVIRONMENTAL AND FIELD BIOLOGY, OR MOLECULAR BIOLOGY. Formerly BIOL 103. Must be enrolled in one of the following Fields of Study: Early Childhood Education, Education, Middle Childhood Education. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

BIOL 1101 - Principles and Concepts of Human Biology

4 Credits

This course is designed to take the basic principles of cell structure and function and incorporate them into a working knowledge of the organ systems of the human body by using hands-on experiments and laboratory exercises to reinforce concepts presented in lecture. A lab fee is charged. Formerly BIOL 110. Must be enrolled in one of the following Fields of Study: Nursing, Pharmaceutical Business. Course Attributes: Math\Natural Sciences.

BIOL 1201 - Introductory Biology

4 Credits

An introduction to the concepts underlying the structure and function of cells including their organization, chemical foundations, metabolism, and the principles and mechanisms of heredity and gene expression. Laboratory activities emphasize the scientific method in exploring these topics. A lab fee is charged. May not be enrolled in one of the following Departments: Biological & Allied Health Sciences. Course Attributes: Math\Natural Sciences.

BIOL 1311 - Biology 1: Cells and Molecules

4 Credits

An introduction to the concepts underlying the structure and function of cells including their organization, chemical foundations, metabolism, and the principles and mechanisms of heredity and gene expression. Laboratory activities emphasize the scientific method in exploring these topics. A lab fee is charged. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Biochemistry ACS Certified, Biology, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Education, Environmental and Field Biology, Forensic Biology, Mechanical Engineering, Medical Laboratory Science, Molecular Biology. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

BIOL 1321 - Biology 2: Organismal Biology

4 Credits

Comprehensive integrated study of plant and animal anatomy and physiology focusing on the major systems. Corresponding inquiry-based laboratories complement the lecture. A lab fee is charged. Offered fall and spring semesters. Prerequisite(s): BIOL 1311. Must be enrolled in one of the following Fields of Study: Biochemistry ACS Certified, Biology, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Education, Environmental and Field Biology, Forensic Biology, Mechanical Engineering, Medical Laboratory Science, Molecular Biology. Course Attributes: Math\Natural Sciences.

BIOL 1351 - Human Anatomy and Histology

4 Credits

Basic anatomy of human tissues and organ systems at the gross and microscopic levels. DOES NOT SATISFY ANY REQUIREMENTS FOR THE MAJOR IN BIOLOGY OR MOLECULAR BIOLOGY. Corresponding laboratories complement the lecture. A lab fee is charged. Offered fall and spring semesters. Prerequisite(s): BIOL 1201 or BIOL 1311.

BIOL 1911 - Summer Honors Institute

1 to 3 Credits Grading mode is S/U

Topics in the Biological and Allied Health Sciences field. Enrollment is restricted to attendees of the Summer Honors Institute. May be repeated as the topic varies. This course may be repeated 6 times. Course Attributes: Requires Instructor Approval.

BIOL 1951 - Biology Orientation

1 Credit Grading mode is S/U

Presentations and discussions relating to adjustment and requirements of academic life within the University, College and the Department of Biological & Allied Health Sciences. Offered spring semester.

BIOL 2001 - Biology 3: Diversity of Life

4 Credits

Investigations of ecological and evolutionary processes, biodiversity, phylogenetic relationships, and paleogeography. A lab fee is charged. Offered spring semester. Prerequisite(s): BIOL 1321. Must be enrolled in one of the following Fields of Study: Biochemistry ACS Certified, Biology, Civil Engineering, , Computer Engineering, Electrical Engineering, Engineering Education, Environmental and Field Biology, Forensic Biology, Mechanical Engineering, Medical Laboratory Science, Molecular Biology. Course Attributes: Math\Natural Sciences.

BIOL 2011 - Environmental Issues

3 Credits

The interaction of humans and their surroundings with an emphasis on the problems arising from increasing human population, pollution, and resource use. Offered fall and spring semesters. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

BIOL 2041 - Systematic Plant Survey

3 Credits

The phylogeny, classification, morphology, and development of selected plant and algal taxa. A Nature Center use fee and lab fee are charged. Formerly BIOL 204. Offered alternate years. Prerequisite(s): BIOL 2001. Course Attributes: Math\Natural Sciences.

BIOL 2101 - Genetics

4 Credits

This course covers Mendelian, Molecular and Population Genetics, with a focus on genotype to phenotype correlations at the biochemical and cellular levels. Emphasis on human genetics. Sub-Topics covered include: Meiosis, Mendel's Laws, Pedigrees and Probability, Recombination, Gene Mapping, Gene Interactions and Mutations. Labs are project-based utilizing prokaryotic and eukaryotic model organisms. A lab fee is charged. Offered fall and spring semesters. Prerequisite(s): BIOL 1311 and (CHEM 1721 or CHEM 1821). Course Attributes: Math\Natural Sciences.

BIOL 2131 - Natural History

2 Credits

The recognition, identification, and understanding of local biotic communities and their inhabitants. Field study is emphasized. A Nature Center use fee and lab fee are charged. Offered spring semester. Course Attributes: Math\Natural Sciences, Informed Ethical Responses, Scientific and Quantitative Literacy.

BIOL 2151 - Microbiology for Nurses

3 Credits

The characteristics and control of microorganisms related to human infectious disease. Prerequisite(s): BIOL 2311 or BIOL 231. Corequisite(s): BIOL 2321. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Math\Natural Sciences.

BIOL 2171 - Molecular Biology

3 Credits

This course covers the structure and function of DNA, RNA and Proteins and is divided into three primary modules: 1.) Molecular Biotechnology 2.) DNA Structure, Organization and Replication 3.) Control of Gene Expression. Primary literature is utilized to connect lecture content with breakthroughs in molecular biology and the biomedical sciences. Current techniques, data analysis and experimental design are also stressed. Ethical considerations associated with biotechnology are discussed. Offered Spring Semester. Prerequisite(s): BIOL 2101. Course Attributes: Math\Natural Sciences.

BIOL 2191 - Forensic Biology 1

4 Credits

Introduction and Investigating the Crime Scene, Identifying and Processing Physical Evidence including, Hair and Fibers, Glass, Fingerprints, Questioned Documents, Firearms, Inorganic substances: Determination of Trace Metals from Gunshot Residue, Arson, Drugs of Abuse, Toxicology, Biological Fluids and Introduction to Forensic DNA Typing, Explosives and Detection of Weapons of Mass Destruction will be covered. Introduction to theory and practice of forensic chemical analysis from spot tests through instrumentation including practical application of this instrumentation. A laboratory fee is charged. High school biology, chemistry and physics are required. Offered fall semester. Prerequisite(s): BIOL 1311 Minimum Grade of C or BIOL 123 Minimum Grade of C. Course Attributes: Math\Natural Sciences.

BIOL 2231 - Invertebrate Zoology

3 Credits

The diversity, ecology, evolution, morphology and developmental biology of invertebrate animals. Emphasis on major phyla. A lab fee is charged. Offered spring semester. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences.

BIOL 2291 - Forensic Biology 2

4 Credits

This course is a continuation of the Forensic Biology 2191 course. Topics will include the practice of forensic sciences including an emphasis on forensic toxicological methods and includes Legal Aspects of Forensic Science, Admissibility Standards for Forensic Evidence in the Courts, including aspects of Federal Rules of Evidence, Frye and Daubert Hearings. Ethical considerations of past and present issues. In addition, the introduction to the practice of quality assurance and quality control in the laboratory. A lab fee is charged. Offered fall semester. Prerequisite(s): BIOL 2191 Minimum Grade of C or BIOL 219 Minimum Grade of C. Course Attributes: Math\Natural Sciences.

BIOL 2311 - Anatomy and Physiology 1

3 Credits

Cells, tissues, skin, nervous, skeletal, muscular systems. CREDIT CANNOT BE RECEIVED FOR BOTH BIOL 2311 AND BIOL 3241. A lab fee is charged. Offered fall and spring semesters. . Prerequisite(s): BIOL 1101 or BIOL 1321 or BIOL 1351 . Course Attributes: Math \ Natural Sciences.

BIOL 2321 - Anatomy and Physiology 2

3 Credits

Continuation of BIOL 2311. Endocrine, blood, cardiovascular, respiratory, excretory, and reproductive systems. CREDIT CANNOT BE RECEIVED FOR BOTH BIOL 2321 AND BIOL 3251. A lab fee is charged. Offered fall and spring semesters. Prerequisite(s): BIOL 2311 or BIOL 231. Course Attributes: Math\Natural Sciences.

BIOL 2381 - Emergency Medical Technician Training

1 Credit

Ohio Department of Public Safety certified training program. Successful completion of course requirements, and National Registry of Emergency Medical Technicians examination provides national EMT_Basic certification. Open to all students. DOES NOT COUNT TOWARD THE MAJOR IN BIOLOGY. Offered fall semester. Course Attributes: Requires Instructor Approval.

BIOL 2401 - OSHA 40 Hour Safety Training

2 Credits

Response operations for the remediation incidents involving hazardous materials. Provided by arrangement with the Rhodes State College in Lima. DOES NOT COUNT AS A BIOLOGY COURSE. Offered fall semester.

BIOL 2451 - OSHA Refresher

1 Credit Grading mode is S/U

Complies with requirements regarding annual follow-up training for hazardous waste site workers who have previously completed BIOL 240 (OSHA Safety Training). Taught at Rhodes State College in Lima. DOES NOT COUNT AS A BIOLOGY COURSE. Offered fall semester. Prerequisite(s): BIOL 2401 or BIOL 240. This course may be repeated 3 times.

BIOL 2511 - Ecology

4 Credits

Study of the theory and application of how organisms interact with their biotic and abiotic environment. Considers organismal-, population-, community-, and ecosystem-level ecology. A lab fee is charged. Offered fall semester. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

BIOL 2531 - Nutrition for Nurses

3 Credits

The maintenance of health through conventional dietary strategies, energy factors associated with body weight and the pathology of various body systems with corresponding medical nutrition therapies. Offered spring semester. Prerequisite(s): BIOL 2321 or BIOL 232. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Math\Natural Sciences.

BIOL 2551 - Epidemiology

3 Credits

A broad overview of the field of epidemiology, with heavy emphasis on infectious diseases. Students will explore the relationship between behavior and health or disease, learn to identify patterns of disease transmission, and learn how to design an effective epidemiological study and how to evaluate and interpret the results of published studies. BIOL 1201 or BIOL 1311 or permission of instructor required prior to enrollment in this course. Offered spring semester. Prerequisite(s): BIOL 1201 or BIOL 1311 or BIOL 122. Course Attributes: Math\Natural Sciences, Diversity-Human Interaction.

BIOL 2591 - Forensic Crime Scene Investigation

4 Credits

The techniques of crime scene investigation and reconstruction will emphasize recognition and search, collection and preservation of physical evidence. Exercises will require acquisition of skills to sketch, note take and photograph crime scenes and evidence. Emphasis will be on the goal of crime scene reconstruction. Practical techniques for fingerprint evidence recovery, cast and impressions along with bloodstain evidence and crime scene photography will be practiced. A laboratory fee is charged. Offered spring semester. Prerequisite(s): BIOL 2291 or BIOL 239. Course Attributes: Math\Natural Sciences.

BIOL 2631 - Biogeography

4 Credits

Current and historic distribution of plants and animals related to major geological and evolutionary concepts. A Nature Center use fee and lab fee are charged. Formerly BIOL 263. Offered alternate spring semesters. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences.

BIOL 2691 - Forensic Computer Analysis

4 Credits

History of Computer crime, investigations of pre-search and on-scene activities, data analysis and file recovery on devices such as computer and cell phones. Actual in class secured network simulations. Hands-on activities utilizing FBI approved software. A laboratory fee is charged. Formerly BIOL 229. Offered spring semester. Prerequisite(s): BIOL 2191 or BIOL 219. Course Attributes: Math\Natural Sciences.

BIOL 2751 - Medicinal Herbs

1 Credit

Students will identify locally growing medicinal herbs, learn current and historical medicinal uses for herbs from many locales and practice hands-on techniques for preparation of herbal remedies. Students will participate in a Service Learning Project to establish a medicinal herb garden on campus, develop an educational pamphlet to serve as a self guided tour of the garden, develop web pages as an educational tool for the herb garden website and deliver a class presentation on one herb. A lab fee is charged.

BIOL 2901 - Special Topics in Biological Sciences

1 to 3 Credits

Grading system at the discretion of the instructor. May be repeated for credit as the topic varies. Maximum of 6 hours can be counted toward the major. Formerly BIOL 290. This course may be repeated 7 times. This course is repeatable for a total of 7 hours. Course Attributes: Requires Instructor Approval.

BIOL 2961 - Independent Study in Biology

1 to 4 Credits

Individual study of topics in Biology. Offered Fall and Spring Semesters. This course is repeatable for a total of 8 hours.

BIOL 3011 - Developmental Anatomy

3 Credits

Development of the embryo through the first 8 weeks, as well as germ cell formation, fertilization, conception, and implantation events. Comparative embryological development presented, with focus on human development. A lab fee is charged. Offered spring semester. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences.

BIOL 3021 - Human Anatomy

4 Credits

Human body systems using x-rays, MRIs, skeletal material, and cadaver dissection. A lab fee is charged. BIOL 2001 or BIOL 122 or permission of instructor required prior to enrollment in this course. Offered fall semester. Prerequisite(s): BIOL 2001 or BIOL 122. Course Attributes: Math\Natural Sciences.

BIOL 3031 - Histology

4 Credits

Human cells, tissues, organs, and systems studied at the microscopic level. A lab fee is charged. Formerly BIOL 303. Offered fall semester. Prerequisite(s): BIOL 1201 or BIOL 1311 or BIOL 122. Course Attributes: Math\Natural Sciences.

BIOL 3051 - Environmental Toxicology

3 Credits

Effects of both man-made and natural toxic agents in plant and animal systems. Offered fall semester. Prerequisite(s): (BIOL 1201 or BIOL 1311) and (CHEM 1721 or CHEM 1821 or CHEM 173 or CHEM 183). Course Attributes: Math\Natural Sciences.

BIOL 3091 - Integrated Plant Anatomy and Physiology

4 Credits

Principles of vascular plant morphology, anatomy, and ultra-structure are integrated with the basic physiological processes of growth, development, transport, and response to the environment. A lab fee is charged. Formerly BIOL 308 and BIOL 310. Offered alternate spring semesters. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences.

BIOL 3111 - Microbiology

4 Credits

Students will be expected to master the basic principles of microbiology. Although students will focus their studies on the different groups of bacteria and viruses, a brief survey of fungi, algae, and protozoans will also be performed. The significance of microbes will be discussed in terms of their medical, environmental, economical, and research importance as students practice laboratory techniques for culturing, identifying, and manipulating them. A lab fee is charged. Offered spring semester. Prerequisite(s): (BIOL 2001 or BIOL 122) and (CHEM 1721 or CHEM 1821 or CHEM 173 or CHEM 183). Course Attributes: Math\Natural Sciences.

BIOL 3131 - Medical Microbiology

3 Credits

Microbial cell biology, antimicrobial chemotherapy, interactions of microorganisms with humans and other organisms, microbial diversity. Offered fall and spring semesters. Prerequisite(s): BIOL 1201 or BIOL 1311 or BIOL 1351. Course Attributes: Math \ Natural Sciences.

BIOL 3151 - Medical Terminology

1 Credit

Students will master the vocabulary of the medical field as it pertains to the ten major body systems. Additionally, students will review medical terminology associated with the following specific related disciplines: pharmacology, optometry, otorhinolaryngology, emergency medicine, gerontology, radiology, oncology, physical therapy, occupational therapy, rehabilitation services, surgery, psychiatry, alternative medicine, and pediatrics. Offered fall semester.

BIOL 3191 - Forensic Microscopy

3 Credits

Introduction to fundamentals of light and optics, to advanced microscopic analysis including forensic sample analysis utilizing bright field, dark field, polarizing, fluorescent and phase contrast microscopy. Laboratory application to forensic science for identification of hairs, fibers and trace evidence. A lab fee is charged. Offered fall semester. Prerequisite(s): BIOL 2291 Minimum Grade of C or BIOL 229 Minimum Grade of C. Course Attributes: Math\Natural Sciences.

BIOL 3221 - Bioscience Laboratory

1 Credit

Methods used in drug development; routine histological techniques, and in vitro and in vivo drug screening. In vivo models of selected diseases are presented. Experimental data analysis in microbiology, molecular biology and cell biology. A lab fee is charged. Formerly BIOL 322 and BIOL 323. Offered fall semester. Prerequisite(s): BIOL 313 or BIOL 3131.

BIOL 3241 - Medical Physiology 1

4 Credits

The first in a sequence of two courses that provides an in-depth survey of human physiology systems. The course includes didactic lectures, group discussion/scenario problem solving, and laboratories that present comparisons across various vertebrate and invertebrate species. The laboratories closely follow the content presented in lectures and incorporate some classical experiments pertaining to neural, skeletal muscle, and gastrointestinal physiology. Students will also work in teams to conduct literature reviews, design research proposals, and present these designs in podium presentations. A lab fee is charged. CREDIT CANNOT BE RECEIVED FOR BOTH BIOL 3241 AND BIOL 2311. Formerly BIOL 325. Offered fall semester. Prerequisite(s): (BIOL 2001 and CHEM 1721) or (BIOL 122 and CHEM 173) or (BIOL 122 and CHEM 183). Course Attributes: Math\Natural Sciences.

BIOL 3251 - Medical Physiology 2

4 Credits

The second in a sequence of two courses that provides an in-depth survey of human physiology systems. The course includes didactic lectures, group discussion/scenario problem solving, and laboratories that incorporate some classical experiments pertaining to cardiovascular, respiratory, renal, endocrine and reproductive physiology. Students will work in teams to collect, analyze and interpret data pertaining to the approved research protocols submitted in Medical Physiology I, and will present their findings in oral (poster) and written formats. A lab fee is charged. CREDIT CANNOT BE RECEIVED FOR BOTH BIOL 3251 and BIOL 2321. Offered spring semester. Prerequisite(s): BIOL 3241 or BIOL 324. Course Attributes: Math\Natural Sciences.

BIOL 3291 - Forensic Physical Methods

4 Credits

Introduction to advanced examination of firearms evidence, gunshot residue analysis, tool mark identification, vehicle lamp examination, serial number restoration and forensic shooting reconstruction and advanced fingerprint identification and latent prints with practical application of the Cogent CAFIS software and interpretation. An introduction to ACE-V application of the paradigm of analysis, comparison, evaluation and verification. A laboratory fee is charged. Offered fall semester. Prerequisite(s): BIOL 2291 Minimum Grade of C or BIOL 239 Minimum Grade of C. Course Attributes: Math\Natural Sciences.

BIOL 3311 - Physiology 1

4 Credits

The first in a sequence of two courses that provides an in-depth survey of human physiology systems. The course includes didactic lectures, pharmacy connections and practical applications of physiological principles through scenario analyses. Major themes covered in this course include: transport across the plasma membrane, the somatic and autonomic nervous systems, smooth and skeletal muscle physiology, and the gastrointestinal system. Formerly BIOL 331. Prerequisite(s): (BIOL 1351 and CHEM 1721) or (BIOL 1351 and CHEM 1821). Must be enrolled in one of the following Fields of Study: Pharmacy. Course Attributes: Math \ Natural Sciences.

BIOL 3321 - Physiology 2

4 Credits

The second in a sequence of two courses that provides an in-depth survey of human physiology systems. The course includes didactic lectures, pharmacy connections and practical applications of physiological principles through scenario analyses. Offered spring semester. Prerequisite(s): BIOL 3311 or BIOL 331. Must be enrolled in one of the following Fields of Study: Pharmacy. Course Attributes: Math\Natural Sciences.

BIOL 3401 - Professional Experience Co-op

4 Credits Grading mode is S/U

Experience in a biologically or environmentally-related occupation with a governmental, consulting or industrial entity. Offered fall semester. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Math\Natural Sciences, Requires Department Approval.

BIOL 3431 - Histological Techniques

3 Credits

Principles and procedures used in the preparation of biological specimens for microscopic study. Techniques include tissue spreads and smears, and paraffin and frozen sections using routine and histochemical stains. A lab fee is charged. Offered as needed. Prerequisite(s): BIOL 1321 or BIOL 122. This course is repeatable for a total of 4 hours. Course Attributes: Math\Natural Sciences.

BIOL 3511 - Cell Biology

3 Credits

Students will be expected to integrate lecture and laboratory data regarding cell structure and function to develop an understanding of eukaryotic cells as dynamic entities. A lab fee is charged. Offered spring semester. Prerequisite(s): (BIOL 1311 Minimum Grade of C and CHEM 1721) or (BIOL 123 and CHEM 173) or (BIOL 123 and CHEM 183). Course Attributes: Math\Natural Sciences.

BIOL 3521 - Integrated Cell and Molecular Biology Laboratory

2 Credits

Execution of advanced research techniques in molecular/cellular biology utilizing plant and animal model systems with added emphasis on data analysis and interpretation. A lab fee is charged. Offered fall and spring semesters. Prerequisite(s): BIOL 2171 or BIOL 3511. Corequisite(s): BIOL 2171, BIOL 3511. Course Attributes: Math\Natural Sciences.

BIOL 3541 - Bioinformatics

4 Credits

Introduction to the use of data mining using the extensive NCBI-based applications for the field of genomic and proteomics analysis. Computer-based laboratory and homework exercises using NCBI databases and other public domain sequence sources to explore genetic diseases, antibiotic resistance, protein function, the relationship between RNA sequence and protein structure prediction, and molecular phylogenetics with a slant to evolution theory. A laboratory fee is charged. Offered fall semester. Prerequisite(s): (BIOL 2101 or BIOL 210) and (BIOL 2171 or BIOL 217). Course Attributes: Math\Natural Sciences.

BIOL 3571 - Forensics DNA Analysis

4 Credits

Review of the historical methods of forensic DNA analysis and including multiple techniques for the extraction, quantification and analysis of genomic STR, mitochondrial DNA and Y-STR analysis. Laboratory will include sample collection methods, storage and characterization of various crime scene samples and performance of human DNA quantification, autosomal DNA analysis, mitotyping and Y-STR typing. Includes the statistical interpretation of forensic DNA evidence, DNA databases, and

Quality Assurance. A laboratory fee is charged. Offered spring semester. Prerequisite(s): BIOL 3111 and BIOL 3151. Corequisite(s): CHEM 3111, CHEM 3151. Course Attributes: Math\Natural Sciences, Requires Instructor Approval.

BIOL 3601 - North American Mammals

3 Credits

Natural history, behavior, ecology and systematics of North American orders and most North American families. A weekend field trip is required. A lab fee is charged. Offered on demand. Prerequisite(s): BIOL 1321. Course Attributes: Math\Natural Sciences.

BIOL 3611 - Entomology

3 Credits

Morphology, physiology, ecology, evolution and taxonomy of insects. Laboratory emphasizes field collection, identification and curation of insects. A weekend field trip is required. A Nature Center use fee and lab fee are charged. BIOL 2231 recommended. Offered alternate fall semesters. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences.

BIOL 3621 - Parasitology

3 Credits

Taxonomy, pathology, ecology, and evolution of major human and veterinary protozoan and metazoan parasites, including their distribution, life cycles, prevention and control. BIOL 2231 recommended. A lab fee is charged. Offered alternate fall semesters. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences.

BIOL 3631 - Ornithology

3 Credits

Study of taxonomy, ecology, natural history, and behavior of birds, with emphasis on North American taxa. A weekend field trip is required. A Nature Center use fee and lab fee are charged. BIOL 2001 or BIOL 123 or permission of instructor is required prior to enrollment in this course. Formerly BIOL 363 Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences, Requires Instructor Approval.

BIOL 3641 - Herpetology

3 Credits

Amphibians and reptiles emphasizing species native and introduced to Ohio and neighboring states. A weekend field trip is required. A Nature Center use fee and lab fee are charged. Formerly BIOL 364. Offered on demand. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences.

BIOL 3651 - Forensic Entomology

3 Credits

Application of insects to legal proceedings, especially medico-criminal. The collection and identification of larval and adult insects from carrion models and their use in determining post-mortem interval is emphasized. Recent developments in the field of forensic entomology, including molecular and laboratory techniques, are examined. A lab fee is charged. Offered alternate fall semesters. Prerequisite(s): BIOL 2001 Minimum Grade of C or BIOL 2291 Minimum Grade of C or BIOL 122 Minimum Grade of C. Course Attributes: Math\Natural Sciences.

BIOL 3661 - Environmental Research Methods

3 Credits

The study of the design, execution, analysis, and communication of original research in environmentally-oriented fields. Offered fall semester. Prerequisite(s): (BIOL 2001 or BIOL 123) and (BIOL 2131 or BIOL 213). Corequisite(s): BIOL 3671, BIOL 3681, BIOL 3691, BIOL 3701. Course Attributes: Math\Natural Sciences, Critical and Creative Thinking, Effective Communication Non-Writing, Effective Communication Writing.

BIOL 3671 - Field Botany

3 Credits

Identification of native aquatic and terrestrial flora with an emphasis on the use of keys, principles of classification, field work, ecological concepts, and herbarium methods. University defensive driving certification required. A Nature Center use fee and lab fee are charged. Offered fall semester. Prerequisite(s): (BIOL 2001 or BIOL 123) and (BIOL 2131 or BIOL 213). Corequisite(s): BIOL 3661, BIOL 3681, BIOL 3691, BIOL 3701. Course Attributes: Math\Natural Sciences.

BIOL 3681 - Ichthyology

3 Credits

Fish biology, particularly Ohio freshwater teleosts, emphasizing field exercises, techniques and systematics. University defensive driving certification required. A Nature Center use fee and lab fee are charged. Offered fall semester. Prerequisite(s): (BIOL 2001 or BIOL 123) and (BIOL 2131 or BIOL 213). Corequisite(s): BIOL 3661, BIOL 3671, BIOL 3691, BIOL 3701. Course Attributes: Math\Natural Sciences.

BIOL 3691 - Field Invertebrate Biology

3 Credits

Field investigations of aquatic and terrestrial invertebrates emphasizing the diversity, ecology, conservation, and methods for their study. University defensive driving certification required. A Nature Center use fee and lab fee are charged Offered fall semester. Prerequisite(s): (BIOL 2001 or BIOL 123) and (BIOL 2131 or BIOL 213). Corequisite(s): BIOL 3661, BIOL 3671, BIOL 3681, BIOL 3701. Course Attributes: Math\Natural Sciences.

BIOL 3701 - Marine Biology

3 Credits

Organisms and their habitats emphasizing southeastern and Gulf coastal and offshore environments. A two-week field trip to a selected marine environment is required. University defensive driving certification required. Additional fee is charged. Offered fall semester. Prerequisite(s): (BIOL 2001 or BIOL 123) and (BIOL 2131 or BIOL 213). Corequisite(s): BIOL 3661, BIOL 3671, BIOL 3681, BIOL 3691. Course Attributes: Math\Natural Sciences, Requires Instructor Approval.

BIOL 3711 - Advanced Marine Biology

3 Credits

Ecological, physical and chemical aspects of marine systems. A two-week field trip to a selected marine environment is required. An additional fee is charged. Prerequisite(s): BIOL 3701 or BIOL 271. Course Attributes: Math\Natural Sciences, Requires Instructor Approval.

BIOL 3831 - Animal Behavior

3 Credits

Invertebrates and vertebrates, stressing observational and descriptive techniques. Offered alternate years. A lab fee is charged. Prerequisite(s): BIOL 2001 or BIOL 123. Course Attributes: Math\Natural Sciences.

BIOL 3841 - Animal Behavior Laboratory

1 Credit

Laboratory to accompany the Animal behavior (BIOL 3831) course. Provides overview of design, completion, analysis, and communication of results from observational and experimental behavioral research. Corequisite(s): BIOL 3831.

BIOL 3911 - Pathophysiology

3 Credits

This course will explore the pathophysiology of various organ systems during disease. Pathological alterations and their effects on physiological and anatomical functions will be analyzed. Emphasis will be on selected clinical manifestations that are most often encountered by health professionals including the disease processes, manifestations, and in some instances, treatment. Prerequisite(s): BIOL 2321 or BIOL 3251 or BIOL 3321.

BIOL 3971 - Self-Directed Studies in the Biological Sciences

1 to 3 Credits

Investigation of specialty fields within the biological sciences by utilizing interactive and/or multimedia programs. A maximum of 3 hours may be counted toward the major. Cannot be used as a general education class. Graded S/U. Formerly BIOL 397. Offered fall and spring semesters. Prerequisite(s): BIOL 2001 or BIOL 123.

BIOL 4231 - Topics in Ecology and Biogeography

3 Credits

Current literature on selected topics. May be repeated for credit as the topics vary. Formerly BIOL 423. Offered spring semester. Prerequisite(s): (BIOL 2511 or BIOL 251) and (BIOL 2631 or BIOL 263). Unlimited repeats permitted. Course Attributes: Math\Natural Sciences, Requires Instructor Approval.

BIOL 4511 - Advanced Topics in Cell Biology

2 Credits

Current literature on selected cell biology. May be repeated for credit as the topics vary. Formerly BIOL 451. Offered fall semester. Prerequisite(s): (BIOL 3511 or BIOL 351) and (CHEM 3111 or CHEM 311) or (PHBS 3411 or PHBS 341). This course is repeatable for a total of 6 hours. Course Attributes: Math\Natural Sciences.

BIOL 4621 - Biological Fluids

3 Credits

Lecture/laboratory coverage of various human body fluids, including urine, sweat, seminal fluid, amniotic fluid, cerebrospinal fluid, and serous fluids, the physical and biochemical methods used to analyze them, and correlations of results with states of health and disease. A lab fee is charged. Minimum grade of C for MLS majors. Offered fall semester. Course Attributes: Math\Natural Sciences, Requires Instructor Approval.

BIOL 4631 - Clinical Immunology

3 Credits

Lecture/laboratory coverage of the structure and function of the human immune system and methods used to diagnose, prognose, and monitor its response in health and disease states. A lab fee is charged. Minimum grade of C for MLS majors. Offered summers. Course Attributes: Math\Natural Sciences, Requires Instructor Approval.

BIOL 4641 - Hematology and Hemostasis

5 Credits

Lecture/laboratory coverage of human blood ontogeny, kinetics, pathophysiology, and methods used to diagnose, prognose, and monitor diseases of the blood, blood forming tissues, and disorders of ASBIOL BIOL hemostasis. A lab fee is charged. Minimum grade of C for MLS majors. Offered fall semester. Course Attributes: Requires Instructor Approval.

BIOL 4671 - Diagnostic Microbiology

5 Credits

Lecture/laboratory coverage of microbes of medical interest, emphasizing application of conventional methods and emerging technologies to isolate, identify, and detect antimicrobial susceptibility of bacteria, viruses, fungi, and parasites associated with human disease. A lab fee is charged. Minimum grade of C for MLS majors. Offered summers. Course Attributes: Requires Instructor Approval.

BIOL 4811 - Internship Program

12 Credits Grading mode is S/U

Experience enables the student to experience working with scientists in a professional workplace. Only 4 credit hours can be used in the major. Formerly BIOL 481. Offered fall and spring semesters. Must be enrolled in one of the following Classifications: Senior.

BIOL 4821 - Internship in Environmental Studies

12 Credits

Experience working with scientists in a professional workplace. Only 4 credit hours can be used in the major. Formerly BIOL 482. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Environmental and Field Biology. Must be enrolled in one of the following Classifications: Senior.

BIOL 4831 - Forensic Biology Internship

4 Credits

Capstone experience for Forensic Biology Major or Biology Major/Molecular Biology Majors with Criminal Justice Option. This experiential program is designed for the student to work in a forensic testing laboratory or laboratory approved by the Director of the Forensic Biology Major and the Internship Committee. Completion of three years of forensic biology coursework or senior status. Formerly BIOL 483 Prerequisite(s): BIOL 3571 Minimum Grade of C or BIOL 357 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Biology, Forensic Biology, Molecular Biology. Course Attributes: Math\Natural Sciences, Requires Department Approval.

BIOL 4841 - Experiential Biology

4 Credits

Summer off-campus field and laboratory experiences. Only available during summer terms. 400 hours of experiential experience required. Must be enrolled in one of the following Classifications: Junior. Course Attributes: Math\Natural Sciences, Requires Department Approval.

BIOL 4901 - Special Topics in Biological Sciences

1 to 4 Credits

Disciplines such as mammalogy and plant taxonomy. May be repeated for credit as topic varies. A lab fee is charged. Formerly BIOL 490. This course is repeatable for a total of 7 hours.

BIOL 4921 - Capstone Experience

1 to 6 Credits

A research program, study abroad, internship or other approved experience in a biological field of study. Student must be approved by the Department in the semester prior to enrollment. Offered fall and spring semesters.

BIOL 4941 - Capstone Seminar

1 Credits

Senior capstone-oral and written presentations of Capstone Experience. The ETS Major Field Test in Biology is required and a special fee is assessed. Offered fall and spring semesters. Prerequisite(s): BIOL 4921 Minimum Grade of C. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

BIOL 4961 - Independent Study in Biology

1 to 4 Credits

Individual study of topics in Biology. Offered Fall and Spring semesters. This course is repeatable for a total of 8 hours.

BIOL 4971 - Independent Research in Biology

1 to 3 Credits

For students interested in mentored research project with the proposed topic approved by the department and chair. The completed research will involve a scientific paper. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Biology, Environmental Studies, Forensic Biology, Medical Laboratory Science, Molecular Biology. Must be enrolled in one of the following Classifications: Senior. This course is repeatable for a total of 7 hours.

Subject - Medical Laboratory Science (MLS)**MLS 4601 - Foundations of Medical Laboratory Science**

3 Credits

Lecture/laboratory coverage of the professional practices, including safety, regulatory issues, phlebotomy and specimen collection, handling, and processing, quality assurance, professionalism and ethics. Lab fee charged. Offered summers. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4611 - Professional Practice & Development

3 Credits

Web-based, interactive coverage of clinical laboratory management including organizational structure, laboratory operations, leadership, team building, legal issues, interpersonal and interdisciplinary communication, resources management, career development and education methodology. Offered fall semester. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4651 - Blood Banking & Transfusion Science

3 Credits

Lecture/laboratory coverage of blood groups biochemistry, genetics, and immunology, and discipline specific practices including donor selection, component preparation, detection and identification of antibodies, and compatibility testing. Lab fee charged. Offered fall semester. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science. Course Attributes: Requires Instructor Approval.

MLS 4661 - Medical Chemistry

4 Credits

Lecture/laboratory coverage of analytical principles, techniques, and applications of tests to diagnose, assess, and manage health and disease states. Lab fee charged. Offered summers. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science. Course Attributes: Requires Instructor Approval.

MLS 4681 - Medical Laboratory Practicum

2 Credits Grading mode is S/U

Practical experience emphasizing policies and procedures governing operations including safety, specimen collection and phlebotomy, resource management, communications and information systems. Lab fee charged. Offered spring semester.

MLS 4691 - Medical Hematology Practicum*4 Credits*

Practical experience emphasizing application of knowledge and skills to perform a wide variety of testing in a clinical setting, and further develop discipline-specific competency. Lab fee is charged. Offered spring semester. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4701 - Blood Bank Practicum*4 Credits*

Practical experience emphasizing application of knowledge and skills to perform a wide variety of testing in a clinical setting, implement therapy protocols, and further develop discipline-specific competency. Lab fee charged. Offered spring semester. Prerequisite(s): CLSS 4651 Minimum Grade of C or CLS 465 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4711 - Medical Chemistry Practicum*4 Credits*

Practical experience emphasizing application of knowledge and skills to perform a wide variety of testing in a clinical setting and further develop discipline-specific competency. Lab fee charged. Offered spring semester. Prerequisite(s): CLSS 4661 Minimum Grade of C or CLS 466 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4721 - Medical Microbiology Practicum*4 Credits*

Practical experience emphasizing application of knowledge and skills in a clinical setting to perform a wide variety of testing and to further develop discipline-specific competency. Lab fee charged. Offered spring semester. Prerequisite(s): BIOL 4671 Minimum Grade of C or BIOL 467 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4731 - Immunology and Infectious Diseases Practicum*2 Credits*

Practical experience emphasizing application of knowledge and skills in a clinical setting to perform a wide variety of testing and to further develop discipline-specific competency. Lab fee charged. Offered spring semester. Prerequisite(s): BIOL 4631 Minimum Grade of C or BIOL 463 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4741 - Case Studies in Medical Laboratory Science*1 Credit Grading mode is S/U*

Exploration of current topics in the field of laboratory medicine culminating in a written manuscript suitable for publication in a discipline-specific journal. The course may be repeated to appreciate various topical prospects. Offered spring semester. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4871 - MLS Capstone Experience*1 Credit*

Students complete a 20 week clinical practicum experience at a WCOMLS program affiliate hospital laboratory. The practicum is arranged by the WCOMLS program director. Students must be a Medical Laboratory Science major or pursuing the post-baccalaureate certificate in Medical Laboratory Science. Offered Spring semester. Corequisite(s): MLS 4941. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science.

MLS 4901 - Special Topics in Medical Laboratory Science*1 to 3 Credits*

Exploration of current topics in the field of laboratory medicine culminating in a written manuscript suitable for publication in a discipline-specific journal. The course may be repeated to appreciate various topical prospects. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science. This course is repeatable for a total of 6 hours.

MLS 4921 - MLS Capstone Experience*1 Credit*

Students complete a 20 week clinical practicum experience at a WCOMLS program affiliate hospital laboratory. The practicum is arranged by the WCOMLS program director. Students must be a Medical Laboratory Science major or pursuing the post-baccalaureate certificate in Medical Laboratory Science. Offered Spring semester. Corequisite(s): MLS 4941. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science. Course Attributes: Critical and Creative Thinking.

MLS 4941 - MLS Capstone Seminar*1 Credit*

Written thesis and oral presentation of the Capstone (clinical practicum) experience. Students must be a Medical Laboratory Science major. Offered spring semester. Corequisite(s): MLS 4921. Must be enrolled in one of the following Major fields of study: Medical Laboratory Science. Course Attributes: Effective Communication Writing.

Subject - Geology (GEOL)**GEOL 2801 - Geology***3 Credits*

Physical geology and paleogeology, including chemical properties of minerals and rocks, geologic processes, and earth materials. May be taken without GEOL 2811. Formerly GEOL 280. Offered fall semester. Course Attributes: Math/Natural Sciences.

GEOL 2811 - Geology Lab*1 Credit*

Labs utilize minerals, rock, sediments, maps and field trips to illustrate techniques used by geologists. A Nature Center use fee and lab fee are charged. Corequisite(s): GEOL 2801.

GEOL 2901 - Special Topics in Geology*1 to 4 Credits*

Labs utilize minerals, rock, sediments, maps, and field trips to illustrate techniques used by geologists. A Nature Center use fee is charged. May be repeated for credit up to total of 8 hours as the topic varies. Formerly GEOL 290. Offered fall semester. Prerequisite(s): GEOL 2801 or GEOL 280. This course is repeatable for a total of 7 hours.

GEOL 2971 - Independent Study in Geology*1 to 3 Credits Grading mode is S/U*

Independent study in geology. Formerly GEOL 297. Offered fall semester. This course is repeatable for a total of 6 hours. Course Attributes: Requires Instructor Approval.

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Professors Gray, Myers, Peterson; **Associate Professors** Bates, Bowers (*Chair*), Broekemeier, Celius, Perrine, Zimmerman; **Assistant Professors** Anderson-Wile, Spiese, Wile; **Introductory Laboratory Coordinator** Duliba; **Director of Laboratories** Daws; **Chemistry Laboratory Instructor** Hall

Mission Statement

The Department of Chemistry and Biochemistry prepares students for research, academic, professional and technical careers in the physical and medical sciences. Students master methods in mathematics and physical sciences while developing competence to identify, analyze and solve scientific problems. The department also meets the needs of non-technical students for an understanding of scientific concepts and the scientific method and the ability to apply quantitative methods to identify and solve real-world problems.

Overview of Purpose and Offerings

The department offers majors and minors in chemistry and biochemistry. Chemistry majors in the department may choose a general education program leading to either the Bachelor of Arts degree or the Bachelor of Science degree. Students may pursue a concentration which results in American Chemical Society (ACS) certification. In addition, the department cooperates with the Center for Teacher Education in program planning for licensure for those desiring to teach at the secondary school level.

Accreditation

The department is approved by the American Chemical Society for the professional education of chemists and biochemists.

Majors, Minors and Degrees Offered

Biochemistry Major (BS)
Chemistry Major (BA, BS)
Law 3+3 in Chemistry (BA)
Biochemistry Minor
Chemistry Minor

Certifications and Licensure

Biochemistry Major/ACS Certified (BS)

Chemistry Major/ACS Certified (BS)

- Adolescent Young Adult (7-12) Physical Sciences: Chemistry Licensure
- Adolescent Young Adult (7-12) Integrated Science Licensure

Pre-Law Program

The Chemistry and Biochemistry Department participates in the 3+3 Law Admissions Program, so that students majoring in Chemistry (BA) may participate in the program. For more information, see the fuller description on page 22.

Major Course Requirements

All required courses in the major subject area must be completed with a grade of "C" or higher. All required courses outside of the major subject area must be completed with a grade of "D" or higher.

Biochemistry

Optional ACS Certification and teacher licensure are available to students completing this major.

BS Degree Requirements (70 credit hours)

CHEM 1811	General Chemistry 1 – Majors (5)
CHEM 1821	General Chemistry 2 – Majors (5)
CHEM 2001	Capstone 1 (1)
CHEM 2311	Analytical Chemistry 1 (4)
CHEM 2481	Chemical Applications of Math (3)
CHEM 2611	Organic Chemistry 1 – Majors (3)
CHEM 2651	Organic Chemistry 1 Lab – Majors (1)
CHEM 2621	Organic Chemistry 2 – Majors (3)
CHEM 2661	Organic Chemistry 2 Lab – Majors (2)
CHEM 3001	Capstone 2 (1)
CHEM 3111	Biochemistry (3)
CHEM 3151	Biochemistry Lab (1)
CHEM 3411	Physical Chemistry 1 (4)
CHEM 4001	Capstone 3 (2)
CHEM 4111	Advanced Biochemistry: Proteins and Metabolism (3)
CHEM 4121	Advanced Biochemistry: Information Transfer (3)
CHEM 4161	Advanced Biochemistry Lab (2)

Other required courses

BIOL 1311	Biology 1: Cells and Molecules (4)
BIOL 1321	Biology 2: Organismal Biology (4)
MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
PHYS 2311	Physics 1 (3)
PHYS 2341	Physics 1 Lab (1)
PHYS 2321	Physics 2 (3)
PHYS 2351	Physics 2 Lab (1)

ACS Certified Biochemistry

Additional requirements (19 to 20 credit hours)

CHEM 2621	Organic Chemistry 2 – Majors (3)
CHEM 2661	Organic Chemistry 2 Lab – Majors (2)
CHEM 3711	Inorganic Chemistry 1 (3)
CHEM 4111	Advanced Biochemistry: Proteins and Metabolism (3)
CHEM 4121	Advanced Biochemistry: Information Transfer (3)
CHEM 4161	Advanced Biochemistry Lab (2)

Choose one:

BIOL 3001/4001	approved by the department
CHEM 3201	Medicinal Chemistry (3)
CHEM 3421	Physical Chemistry 2 (4)
CHEM 3601	Organic Synthesis (4)
CHEM 4321	Analytical Chemistry 2 (3)
CHEM 4601	Physical Organic Chemistry (3)
CHEM 4811	Senior Research 1 (2)
	and
CHEM 4821	Senior Research 2 (2)

Chemistry

Optional ACS Certification (BS) and teacher licensure (BA, BS) are available to students completing this major.

BA Degree Requirements (46 to 51 credit hours)

CHEM 1811	General Chemistry 1 – Majors (5)
CHEM 1821	General Chemistry 2 – Majors (5)
CHEM 2001	Capstone 1 (1)
CHEM 2311	Analytical Chemistry 1 (4)
CHEM 2611	Organic Chemistry 1 – Majors (3)
CHEM 2651	Organic Chemistry 1 Lab – Majors (1)
CHEM 2401	Elements of Physical Chemistry (3)
	or
CHEM 3411	Physical Chemistry 1 (4)
CHEM 3001	Capstone 2 (1)
CHEM 4001	Capstone 3 (2)

Choose two:

CHEM 2621	Organic Chemistry 2 – Majors (3)
	and
CHEM 2661	Organic Chemistry 2 Lab – Majors (2)
CHEM 3111	Biochemistry (3)
	and
CHEM 3151	Biochemistry Lab (1)
CHEM 3201	Medicinal Chemistry (3)
	and
CHEM 3261	Medicinal Chemistry Lab (1)
CHEM 3421	Physical Chemistry 2 (4)
CHEM 3601	Organic Synthesis (4)
CHEM 3711	Inorganic Chemistry 1 (3)
	and
CHEM 3751	Inorganic Chemistry 1 Lab (1)
CHEM 4321	Analytical Chemistry 2 (3)

Other Required Courses

PHYS 2111	General Physics 1 (3)
PHYS 2121	General Physics 2 (3)
PHYS 2341	Physics 1 Lab (1)
PHYS 2351	Physics 2 Lab (1)
	or
PHYS 2311	Physics 1 (3)
PHYS 2321	Physics 2 (3)
PHYS 2341	Physics 1 Lab (1)
PHYS 2351	Physics 2 Lab (1)

Choose two:

MATH 1431	Calculus for Science and Technology (3)
MATH 1461	Calculus for Life Sciences (3)
MATH 1611	Calculus /w Precalculus 1 (4)
MATH 1621	Calculus /w Precalculus 2 (4)
MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
STAT 1561	Statistics for Professionals 1 (3)
STAT 1761	Statistics for Pharmacy (3)
STAT 2501	Statistics for Scientists and Engineers (3)

BS Degree Requirements (58 credit hours)

CHEM 1811	General Chemistry 1 – Majors (5)
CHEM 1821	General Chemistry 2 – Majors (5)
CHEM 2001	Capstone 1 (1)
CHEM 2311	Analytical Chemistry 1 (4)
CHEM 2481	Chemical Applications of Math (3)
CHEM 2611	Organic Chemistry 1 – Majors (3)
CHEM 2651	Organic Chemistry 1 Lab – Majors (1)
CHEM 2621	Organic Chemistry 2 – Majors (3)
CHEM 2661	Organic Chemistry 2 Lab – Majors (2)
CHEM 3411	Physical Chemistry 1 (4)
CHEM 3421	Physical Chemistry 2 (4)
CHEM 3711	Inorganic Chemistry 1 (3)
CHEM 3751	Inorganic Chemistry 1 Lab (1)
CHEM 3001	Capstone 2 (1)
CHEM 4001	Capstone 3 (2)

Other Required Courses

MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
PHYS 2311	Physics 1 (3)
PHYS 2341	Physics 1 Lab (1)
PHYS 2321	Physics 2 (3)
PHYS 2351	Physics 2 Lab (1)

ACS Certified Chemistry

Additional requirements (18 to 20 credit hours)

CHEM 2621	Organic Chemistry 2 – Majors (3)
CHEM 2661	Organic Chemistry 2 Lab – Majors (2)
CHEM 3111	Biochemistry (3)
CHEM 3421	Physical Chemistry 2 (4)

Choose two:

CHEM 3201	Medicinal Chemistry (3)
CHEM 3601	Organic Synthesis (4)
CHEM 4321	Analytical Chemistry 2 (3)
CHEM 4421	Advanced Physical Chemistry (3)
CHEM 4721	Inorganic Chemistry 2 (3)
CHEM 4811	Senior Research 1 (2)
	and
CHEM 4821	Senior Research 2 (2)

ACS certified chemistry course work must include 400 laboratory hours above general chemistry.

Teacher Licensure in Chemistry This option is available to students majoring in biochemistry or chemistry.

Additional requirements (51 credit hours)

BIOL 1311	Biology 1: Cells and Molecules (4)
EDUC 1151	Culture and Schooling (3) (20 hours field)
EDUC 2101	Exceptional Learners (3) (20 hours field)
EDUC 2681	Curriculum and Assessment (3) (20 hours field)
EDUC 3201	Instructional Media and Educational Technologies (3)
EDUC 3451	Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4401	Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4511	Integrated Science Methods (3) (20 hours field)
EDUC 4451	Leadership Seminar in Education (2)
EDUC 4721	Student Teaching/AYA (12)

Choose one:

GEOL 2801	Geology (3)
PHYS 1051	Planetary Astronomy (3)

Specified general education courses

CAMS 1311	Communication in the Classroom (3)
PSYC 1001	Psychology (3)
PSYC 2171	Adolescent Psychology (3)

Minors

Students may earn a minor in biochemistry or chemistry, but not both. All courses required for a minor must be completed with a grade of "C" or higher.

Biochemistry Minor (25 credit hours)

CHEM 1711	General Chemistry 1 (5)
CHEM 1721	General Chemistry 2 (5)
CHEM 2511	Organic Chemistry 1 (3)
CHEM 2551	Organic Chemistry 1 Lab (1)
CHEM 2521	Organic Chemistry 2 (3)
CHEM 2561	Organic Chemistry 2 Lab (1)
CHEM 3111	Biochemistry (3)
CHEM 3151	Biochemistry Lab (1)

Choose one:

CHEM 4111	Advanced Biochemistry: Proteins and Metabolism (3)
CHEM 4121	Advanced Biochemistry: Information Transfer (3)

Chemistry Minor (21 to 22 credit hours)

CHEM 1711	General Chemistry 1 (5)
CHEM 1721	General Chemistry 2 (5)

Choose three:

CHEM 2311	Analytical Chemistry 1 (4)
CHEM 2401	Elements of Physical Chemistry (3)
CHEM 2511	Organic Chemistry 1 (3)
	and
CHEM 2551	Organic Chemistry 1 Lab (1)
CHEM 2521	Organic Chemistry 2 (3)
	and
CHEM 2561	Organic Chemistry 2 Lab (1)
CHEM 3111	Biochemistry (3)
CHEM 3201	Medicinal Chemistry (3)
CHEM 3411	Physical Chemistry 1 (4)
CHEM 3421	Physical Chemistry 2 (4)
CHEM 3601	Organic Synthesis (4)
CHEM 3711	Inorganic Chemistry 1 (3)
CHEM 4321	Analytical Chemistry 2 (3)

Subject - Chemistry (CHEM)

CHEM 1001 - Chemistry in Society

3 Credits

The behavior of matter at the macroscopic level and explanations of this behavior using molecular-level models. Applications in everyday life. Chemistry 1711 recommended for science majors. Offered fall and spring semesters. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

CHEM 1201 - Chemistry for the Health Sciences

5 Credits

Chemical principles and theories in the areas of atomic structure, chemical bonding, solution chemistry, redox chemistry and acid/base chemistry. Basic principles and applications of kinetics and thermodynamics. Stereochemistry, functional groups and the basic properties of functional groups. Structures, properties and functions of biologically relevant carbohydrates, lipids, and proteins. Facets of DNA structures and replication as well as relevant concepts in protein synthesis. Principles of enzyme catalysis in biochemical processes with application to specific pathways in both carbohydrate and lipid metabolism. Basic bioenergetic principles as present in the citric acid and oxidative phosphorylation. Lab supports principles presented in lecture. High school chemistry recommended. Offered fall and spring semesters. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

CHEM 1501 - Chemistry for Engineering

3 Credits

Atomic structure, the mole, stoichiometry, chemical reactions, thermochemistry, electron configuration, periodicity, bonding, molecular structure, states of matter, solutions, thermodynamics, kinetics, equilibrium, acids, bases, and electrochemistry. Taken concurrently with CHEM 1551. High school chemistry recommended. Offered fall semester. Prerequisite(s): CHEM 1551. Course Attributes: Math\Natural Sciences.

CHEM 1551 - Chemistry for Engineering Lab

1 Credit

Lab for CHEM 1501. Taken concurrently with CHEM 1501. Offered fall semester. Prerequisite(s): CHEM 1501.

CHEM 1711 - General Chemistry 1

5 Credits

Macroscopic concepts of the elements, compounds and reactions. Stoichiometry, thermochemistry and properties of ideal gases as applied to reactive systems. Emphasis on acid-base, redox, and descriptive chemistry. Atomic theory and its application to bonding. Laboratory supports principles presented in lecture, including spectroscopy. Credit may be received for either CHEM 1711, or CHEM 1811, but not for both. High school chemistry required. Offered fall semester. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

CHEM 1721 - General Chemistry 2**5 Credits**

Molecular structure, condensed phases, chemical reactions and mechanisms. Physical principles controlling chemical reactions including kinetics, thermodynamics, electrochemistry, and acid-base equilibrium conditions. Laboratory supports principles presented in lecture, including kinetics and equilibrium. Credit may be received for either CHEM 1721 or CHEM 1821, but not for both. Offered spring semester. Prerequisite(s): CHEM 1711 or CHEM 1811 or CHEM 172 or CHEM 182. Course Attributes: Math\Natural Sciences.

CHEM 1811 - General Chemistry 1 - Majors**5 Credits**

Macroscopic concepts of the elements, compounds and reactions. Stoichiometry, thermochemistry and properties of ideal gases as applied to reactive systems. Emphasis on acid-base, redox, and descriptive chemistry. Atomic theory and its application to bonding. Laboratory supports principles presented in lecture, including spectroscopy. Credit may be received for either CHEM 1711, or CHEM 1811, but not for both. Offered fall semester. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

CHEM 1821 - General Chemistry 2 - Majors**5 Credits**

Molecular structure, condensed phases, chemical reactions and mechanisms. Physical principles controlling chemical reactions including kinetics, thermodynamics, electrochemistry, and acid-base equilibrium conditions. Laboratory supports principles presented in lecture, including kinetics and equilibrium. Credit may be received for either CHEM 1721 or CHEM 1821, but not for both. Offered spring semester. Prerequisite(s): CHEM 1711 or CHEM 1811 or CHEM 172 or CHEM 182. Course Attributes: Math\Natural Sciences.

CHEM 1901 - Special Topics**1 to 3 Credits**

Can be repeated as topic varies. Unlimited repeats permitted.

CHEM 1911 - ST-Summer Honors Institute**1 Credit Grading mode is S/U**

Topics in Chemistry and Biochemistry field for Summer Honors Institute only. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

CHEM 2001 - Capstone 1**1 Credit**

Methods and objectives of chemical research. Undergraduate research opportunities in the department. Science literature search engines. Summer research opportunities at other institutions. Offered fall semester. Prerequisite(s): CHEM 1821 or CHEM 1721 or CHEM 183 or CHEM 173. Course Attributes: Informed Ethical Responses.

CHEM 2311 - Analytical Chemistry 1**4 Credits**

Practice and principles of modern chemical methods of analysis including instrumental methods. Offered fall semester. Prerequisite(s): CHEM 1721 or CHEM 1821 or CHEM 183 or CHEM 173. Course Attributes: Math\Natural Sciences.

CHEM 2401 - Elements of Physical Chemistry**3 Credits**

Principles and applications of selected areas of physical chemistry including thermodynamics, kinetics, and spectroscopy. Credit may be received for CHEM 2401 or CHEM 3411 but not for both. Offered alternate spring semesters. Prerequisite(s): CHEM 1501 or CHEM 1721 or CHEM 1821 or CHEM 183 or CHEM 173 or CHEM 226. Course Attributes: Math\Natural Sciences.

CHEM 2481 - Chemical Applications of Mathematics**3 Credits**

Application of mathematical techniques to problems in chemistry. Offered spring semester. Prerequisite(s): (CHEM 1721 or CHEM 1821 or CHEM 183 or CHEM 173) and (MATH 1641 or MATH 165). Course Attributes: Math\Natural Sciences.

CHEM 2511 - Organic Chemistry 1**3 Credits**

Bonding, acidity, functional groups, conformations, stereochemistry, nomenclature, fundamental reactions/mechanisms (SN1, SN2, E1, E2) of organic chemistry, addition reactions to alkenes and alkynes, oxidation and reduction, and structure determination using IR, NMR, and MS spectroscopy. Taken concurrently with CHEM 2551. Credit may be received for CHEM 2511 or 2611, but not for both. Offered fall semester. Prerequisite(s): (CHEM 1721 or CHEM 1821 or CHEM 183 or CHEM 173) and CHEM 2551. Course Attributes: Math\Natural Sciences.

CHEM 2521 - Organic Chemistry 2**3 Credits**

Reactions with/on radicals, dienes, aromatics, alcohols, carbonyls, amines, the structure and chemistry of carbohydrates, and organic polymer chemistry. Taken concurrently with CHEM 2561. Credit may be received for CHEM 2521 or 2621, but not for both. Formerly known as CHEM 253. Offered spring semester. Prerequisite(s): (CHEM 2511 and CHEM 2551 and CHEM 2561) or (CHEM 2611 and CHEM 2651 and CHEM 2561) or (CHEM 252 and CHEM 2561) or (CHEM 262 and CHEM 2561). Course Attributes: Math\Natural Sciences.

CHEM 2551 - Organic Chemistry Lab 1**1 Credit**

Basic laboratory techniques used for synthesis, isolation, purification, and analysis of organic compounds are studied in the course. Some functional group interconversion, substitution, and elimination processes are introduced. Structure analysis using spectroscopy. The lab experiments are designed to illustrate practical implementation of the theories and concepts learned in lecture. Taken concurrently with CHEM 2511. Credit may be received for CHEM 2551 or 2651, but not for both. Offered fall semester. Prerequisite(s): CHEM 2511.

CHEM 2561 - Organic Chemistry Lab 2**1 Credit**

Reactions with/on radicals, dienes, aromatics, alcohols, carbonyls, amines, the structure and chemistry of carbohydrates, and organic polymer chemistry. Taken concurrently with CHEM 2521. Credit may be received for CHEM 2561 or 2661, but not for both. Offered spring semester. Prerequisite(s): CHEM 2521.

CHEM 2611 - Organic Chemistry 1 - Majors**3 Credits**

Bonding, acidity, functional groups, conformations, stereochemistry, nomenclature, fundamental reactions/mechanisms (SN1, SN2, E1, E2) of organic chemistry, addition reactions to alkenes and alkynes, oxidation and reduction, and structure determination using IR, NMR, and MS spectroscopy. Taken concurrently with CHEM 2651. Credit may be received for CHEM 2511 or 2611, but not for both. Offered fall semester. Prerequisite(s): (CHEM 1721 or CHEM 1821 or CHEM 183 or CHEM 173). Corequisite(s): CHEM 2651. Course Attributes: Math\Natural Sciences.

CHEM 2621 - Organic Chemistry 2 - Majors**3 Credits**

Reactions with/on radicals, dienes, aromatics, alcohols, carbonyls, amines, the structure and chemistry of carbohydrates, and organic polymer chemistry. Taken concurrently with CHEM 2661. Credit may be received for CHEM 2521 or 2621, but not for both. Formerly known as CHEM 263. Offered spring semester. Prerequisite(s): (CHEM 2511 and CHEM 2551 and CHEM 2661) or (CHEM 2611 and CHEM 2651 and CHEM 2661) or (CHEM 252 and CHEM 2661) or (CHEM 262 and CHEM 2661). Course Attributes: Math\Natural Sciences.

CHEM 2651 - Organic Chemistry Lab 1 - Majors**1 Credit**

Basic laboratory techniques used for synthesis, isolation, purification, and analysis of organic compounds are studied in the course. Some functional group interconversion, substitution, and elimination processes are introduced. Structure analysis using spectroscopy. The lab experiments are designed to illustrate practical implementation of the theories and concepts learned in lecture. Taken concurrently with CHEM 2611. Credit may be received for CHEM 2551 or 2651, but not for both. Offered fall semester. Prerequisite(s): CHEM 2611.

CHEM 2661 - Organic Chemistry Lab 2 - Majors*2 Credits*

Free radical reactions, cycloaddition, electrophilic aromatic substitution, and other reactions relevant to the lecture material are explored. The reactivity of phenols, enolates, amines, and carboxylic acid derivatives is investigated. The structure of carbohydrates, and representative multiple-step organic syntheses of relevant pharmaceutical agents are explored. Grignard and multiple step synthesis are introduced. Use of the chemical literature. Routine acquisition of NMR, IR, MS spectra and other physical data are used for structure elucidation of unknown organic compounds. In-depth coverage of two-dimensional NMR, IR UV, and MS spectroscopy. Taken concurrently with CHEM 2621. Credit may be received for CHEM 2561 or 2661, but not for both. Formerly known as CHEM 266. Offered spring semester. Prerequisite(s): CHEM 2621. Course Attributes: Critical and Creative Thinking.

CHEM 2901 - Special Topics*1 to 3 Credits*

Can be repeated as topic varies. Unlimited repeats permitted.

CHEM 2971 - Independent Study*1 to 4 Credits*

Offered fall and spring semesters. This course is repeatable for a total of 4 hours.

CHEM 3001 - Capstone 2*1 Credit*

Careers in the chemical/biochemical sciences. Critical evaluation of scientific literature. Preparation for oral presentations. Offered spring semester. Prerequisite(s): CHEM 2001 or CHEM 200. Course Attributes: Effective Communication Writing.

CHEM 3111 - Biochemistry*3 Credits*

Fundamentals of biochemistry with emphasis on the structures and properties of the major classes of biological molecules and the relationships between biomolecular structure and function; introduction to enzyme catalysis and metabolic pathways. Optional associated laboratory: CHEM 3151. Offered fall semester. Prerequisite(s): (CHEM 2521 and CHEM 2561) or (CHEM 2621 and CHEM 2661) or (CHEM 253 or CHEM 263). Course Attributes: Math\Natural Sciences.

CHEM 3151 - Biochemistry Lab*1 Credit*

Structure and properties of proteins, carbohydrates, lipids, and nucleic acids; introduction to enzyme kinetics and proteomics. Taken concurrently with CHEM 3111 or PHBS 3411. Offered fall semester. Prerequisite(s): CHEM 3111 or PHBS 3411.

CHEM 3201 - Medicinal Chemistry*3 Credits*

Fundamentals of drug design and drug action including SAR, stereochemical considerations, free energy relationships, receptors, enzymes, prodrugs and drug metabolism. Isolation, synthesis, characterization, and biology of bioactive natural products. Offered alternate spring semesters. Prerequisite(s): (CHEM 2521 and CHEM 2561) or (CHEM 2621 and CHEM 2661) or (CHEM 253 or CHEM 263). Course Attributes: Math\Natural Sciences.

CHEM 3261 - Medicinal Chemistry Lab*1 Credit*

Synthesis and characterization of small molecule inhibitors. Fundamentals of a tumor cell assay. SAR using experimental data. Offered alternate spring semesters. Corequisite(s): CHEM 3201.

CHEM 3411 - Physical Chemistry 1*4 Credits*

Classical thermodynamics. Quantum mechanics of atoms and molecules. Laboratory illustrates principles and applications. Offered fall semester. Prerequisite(s): (CHEM 2481 and PHYS 2311 and PHYS 2321 and PHYS 2341 and PHYS 2351) or (MATH 2631 and MATH 2651 and MATH 3261 and PHYS 2311 and PHYS 2321 and PHYS 2341 and PHYS 2351). Course Attributes: Math\Natural Sciences, Integration Across Disciplines.

CHEM 3421 - Physical Chemistry 2*4 Credits*

Molecular structure, statistical thermodynamics, and reaction dynamics. Laboratory illustrates applications in spectroscopy and kinetics. Offered spring semester. Prerequisite(s): CHEM 3411 or CHEM 342. Course Attributes: Math\Natural Sciences.

CHEM 3601 - Organic Synthesis*4 Credits*

Retrosynthetic analysis, functional group transformations, asymmetric synthesis, organometallic chemistry. Laboratory involves multistep synthesis utilizing techniques to work with air and water sensitive materials, standard purification techniques, and organic product characterization. Offered alternate spring semesters. Prerequisite(s): (CHEM 2621 and CHEM 2661) or CHEM 263. Course Attributes: Math\Natural Sciences.

CHEM 3711 - Inorganic Chemistry 1*3 Credits*

Bonding, structures, preparation, properties, compounds, and reactions of main group and transition metal elements. Offered fall semester. Prerequisite(s): CHEM 2621 or CHEM 263.

CHEM 3751 - Inorganic Chemistry 1 Lab*1 Credit*

Basic methods of synthesis and characterization. Offered fall semester. Prerequisite(s): CHEM 2661 Minimum Grade of C. Corequisite(s): CHEM 3711.

CHEM 3901 - Special Topics*1 to 3 Credits*

Can be repeated as topic varies. Unlimited repeats permitted.

CHEM 4001 - Capstone 3*2 Credits*

Oral presentation and a formal paper on a chemical topic. Offered spring semester. Prerequisite(s): CHEM 3001 or CHEM 300. Course Attributes: Critical and Creative Thinking, Effective Communication Non-Writing.

CHEM 4111 - Advanced Biochemistry: Proteins and Metabolism*3 Credits*

In depth study of protein structure and function; enzyme kinetics and mechanisms; regulation and integration of metabolism; bioenergetics. Offered alternate spring semesters. Prerequisite(s): CHEM 3111 or CHEM 311. Course Attributes: Math\Natural Sciences.

CHEM 4121 - Advanced Biochemistry: Information Transfer*3 Credits*

DNA replication and repair; transcription; RNA modifications; translation; control of gene expression; signal transduction. Offered alternate spring semesters. Prerequisite(s): CHEM 3111 or CHEM 311. Course Attributes: Math\Natural Sciences.

CHEM 4161 - Advanced Biochemistry Lab*2 Credits*

Purification and characterization of biological macromolecules; enzyme kinetics and uses of enzymes in biochemical analyses. Offered spring semester. Prerequisite(s): CHEM 3151 or CHEM 315.

CHEM 4321 - Analytical Chemistry 2*3 Credits*

Theoretical and experimental study of modern methods of instrumental analysis. Principles, design and use of chemical instrumentation. Laboratory stresses independent, investigative experimentation. Offered alternate spring semesters. Prerequisite(s): (CHEM 2311 or CHEM 351) and CHEM 3411. Course Attributes: Math\Natural Sciences.

CHEM 4421 - Advanced Physical Chemistry*3 Credits*

Selected topics from group theory, advanced quantum mechanics, spectroscopy and chemical dynamics. Can be taken concurrently with CHEM 3421. Offered alternate spring semesters. Prerequisite(s): CHEM 3421 or CHEM 343. Course Attributes: Math\Natural Sciences.

CHEM 4601 - Physical Organic Chemistry

3 Credits

Application of molecular orbital theory, thermodynamics, and kinetics to the study of organic reaction mechanisms. Offered alternate spring semesters. Prerequisite(s): (CHEM 2521 or CHEM 2621 or CHEM 253 or CHEM 263) and CHEM 3411. Concurrency allowed. Course Attributes: Math\Natural Sciences.

CHEM 4721 - Inorganic Chemistry 2

3 Credits

Theory, bonding, spectroscopy, reaction mechanisms and organometallic compounds. Can be taken concurrently with CHEM 3421. Offered alternate spring semesters. Prerequisite(s): (CHEM 3711 or CHEM 324) and (CHEM 3421 or CHEM 343). Course Attributes: Math\Natural Sciences.

CHEM 4811 - Senior Research 1

2 Credits

Mentored research project. Offered fall semester. Prerequisite(s): CHEM 3001 or CHEM 300.

CHEM 4821 - Senior Research 2

2 Credits

Mentored research project. Offered spring semester. Prerequisite(s): CHEM 4811.

CHEM 4901 - Special Topics

1 to 3 Credits

Can be repeated as topic varies. Unlimited repeats permitted.

CHEM 4971 - Independent Study

1 to 4 Credits

Offered fall and spring semesters. This course is repeatable for a total of 4 hours.

DEPARTMENT OF COMMUNICATION AND MEDIA STUDIES

Associate Professors Walton (*Chair*), North; **Assistant Professors** Agozzino, Cruea, Fleck, Tilton

Mission

Communication and Media Studies majors emphasize a liberal arts education combined with a professional program, designed to produce graduates who are prepared for a lifetime of learning in a diverse and changing world. Our flexible programs maintain professional standards while adapting easily to individual needs and interests. Our curriculum and manner of instruction encourage critical thinking, the development of ethical standards and an understanding of human communication in all aspects of personal and professional life. With a strong foundation in general knowledge and specialty studies, graduates are prepared for entry level positions or graduate studies in their professional areas. They also attain the reasoning, organization and management skills necessary for a useful and meaningful life.

Overview Statement

The departmental course offerings promote understanding of the theory, practice and aesthetics of human communication. Students pursue a major particular to their professional education goals.

Majors, Minors and Degrees Offered

Communication Studies Major (BA)
Multimedia Journalism Major (BA)
Public Relations Major (BA)
Communication Studies Minor
Digital Media Production Minor
Multimedia Journalism Minor
Public Relations Minor
Social Media Minor

Departmental Activities

Students are encouraged to become involved in a variety of departmental activities. ONU3-TV, ONU's Local Access Cable Channel, allows students to gain experience in broadcast programming and production. WONB-94.9 FM, ONU's 3,000 watt FM station, provides opportunities in music programming, news and sports announcing and audio production. *The Northern Review* (ONU's campus newspaper) provides an opportunity for students to gain experience in both print and online publishing. The Public Relations Student Society of America introduces students to professional networking, workshops, campaigns, and service. The National Communication Association Student Club allows students an opportunity to interact with professionals and provide service to the campus community. Credit toward graduation may be received for participation in some activities.

Major Course Requirements

All required courses in the major subject area must be completed with a grade of "C" or higher.

Communication Studies Major

Communication Studies provides knowledge and skills emphasizing the close relationship between effective communication and successful personal and professional relationships. The major prepares students for graduate study and for careers in fields such as human resources, law, business, education, entrepreneurship and politics.

BA Degree Requirements (39 credit hours)

CAMS 1301 Presentational Speaking (3)
CAMS 2311 Interpersonal Communication (3)
CAMS 3331 Communication Theory (3)
CAMS 3371 Internship (3)
CAMS 4381 Capstone (3)

Rhetorical Studies – Select six (6) hours:

CAMS 2301 Advanced Presentational Speaking (3)
CAMS 3301 Interviewing (3)
CAMS 3331 Communication Theory (3)
CAMS 4281 Public Relations Campaigns Capstone (3)
CAMS 4301 Film Study and Analysis (3)
CAMS 4311 Political Communication and Campaigns (3)
ENGL 4521 Rhetorical Theory (3)

Research Methods – Select three (3) hours:

CAMS 3001 Communication Research Methods (3)
ISR 2531 Social Research 1 (3)
MRKT 3341 Marketing Research (3)

Communication Contexts – Select six (6) hours:

CAMS 1101 Introduction to Convergent Media (3)
CAMS 1201 Introduction to Public Relations (3)
CAMS 1311 Communication in the Classroom (3)
CAMS 3311 Cross-cultural Communication (3)
CAMS 2321 Group Dynamics and Team Interaction (3)
CAMS 3321 Organizational Communication (3)
CAMS 2331 Health Communication (3)
CAMS 2391 Special Topics (3)
or
CAMS 4391 Special Topics (3)
BIZ 2331 Behavioral Management for Business Planning (3)
or
BIZ 2511 Marketing for Business Planning (3)
TAAD 2111 The Art of Presenting: Arts Administration (3)

Writing – Select three (3) hours:

CAMS 2201 Public Relations Writing (3)
CAMS 2151 Multimedia Writing (3)
CAMS 2101 News Writing (3)
ENGL 2051 Writing in the Profession (3)
CAMS 3101 Feature Writing (3)
TECH 1421 Web Development and Multimedia (3)

Multimedia Journalism Major

The Multimedia Journalism major is a cutting-edge program designed to prepare students for 21st century advances in the field of journalism. Students will learn the fundamentals of writing and editing, and develop the skills necessary to tell stories in a multimedia world, using the latest technologies and software. Course work is enhanced with practical experience gained through participation in on campus media and off campus internships. The program is designed to ensure students acquire the practical skills and well-rounded knowledge needed to succeed in the quickly evolving news profession.

BA Degree Requirements (45 credit hours)

CAMS 1101	Introduction to Convergent Media (3)
CAMS 2101	News Writing (3)
CAMS 2111	Layout and Design (3)
CAMS 3121	Convergent Publishing (3)
CAMS 2161	Multimedia Journalism Practicum (1 hour x 6 Semesters)
CAMS 3171	Multimedia Journalism Internship (3)
CAMS 3111	Editing (3)
CAMS 4121	Computer Assisted Reporting (3)
CAMS 4001	Communication Law and Ethics (3)
CAMS 3001	Communication Research (3)
CAMS 4181	Multimedia Journalism Capstone (3)

Select three (3) credits:

CAMS 3131	Photojournalism
CAMS 3141	Video Storytelling

Select six (6) credits:

CAMS 3131	Photojournalism (If not already taken for major) (3)
CAMS 3141	Video Storytelling (If not already taken for major) (3)
CAMS 4191	Special Topics in Multimedia Journalism (1-3)
CAMS 4501	Media Management (3)
CAMS 1201	Introduction to Public Relations (3)
CAMS 1401	Social Media Principles (3)
DSGN 2651	History of Graphic Design (3)
TECH 1421	Web Design & Development (3)
ENGL 2051	Writing in the Professions (3)
ENGL 4421	Writing in Digital Environments (3)
ENGL 2001	Grammar in Context (3)

Public Relations Major

The Public Relations program prepares students for jobs with agencies, nonprofit organizations and corporations doing both internal and external communication tasks. Public relations majors learn how to conduct research, plan programs, produce communication materials and carry out program evaluation. Ohio Northern University's public relations program is designated as Certified for Education in Public Relations (CEPR) by the Public Relations Society of America (PRSA), the largest professional organization in the public relations field.

BA Degree Requirements (47 credit hours)

CAMS 1201	Introduction to Public Relations (3)
CAMS 2201	Public Relations Writing (3)
CAMS 1401	Social Media Principles (3)
CAMS 3001	Communication Research (3)
CAMS 3201	Advanced Public Relations Writing (3)
CAMS 3271	Internship (1)
CAMS 4001	Communication Law and Ethics (3)
CAMS 4281	Public Relations Campaigns Capstone (3)
CAMS 4201	Public Relations Case Studies (3)
CAMS 2261	Public Relations Practicum (4)

Select twelve (12) credits:

CAMS 1301	Presentational Speaking (3)
CAMS 2311	Interpersonal Communication (3)
CAMS 2321	Group Dynamics and Team Interaction (3)
CAMS 2151	Multimedia Writing (3)
CAMS 3211	Issues in Public Relations (3)
CAMS 2291 or CAMS 4291	Special Topics in Public Relations (3)
CAMS 2101	News Writing (3)
ISR 2531	Research Methods (3)

Select six (6) credits:

CAMS 3301	Interviewing (3)
BIZ 2331	Behavioral Management and Business Planning (3)
BIZ 2511	Marketing and Business Planning (3)
CAMS 3331	Communication Theory (3)
CAMS 3321	Organizational Communication (3)

Minors

All courses required for a minor must be completed with a grade of "C" or higher.

Communication Studies Minor (18 credit hours)

CAMS 1301	Presentational Speaking (3)
CAMS 2311	Interpersonal Communication (3)
CAMS 3331	Communication Theory (3)

Select at least three (3) hours from the area of Rhetorical Studies within the Communication Studies major. See page 64.

Select at least three (3) hours from the area of Communication Contexts within the Communication Studies major. See page 64.

Select at three (3) hours from any of the four areas within the Communication Studies major. See page 64.

Multimedia Journalism Minor (18 credit hours)

CAMS 1101	Introduction to Convergent Media (3)
CAMS 2101	News Writing (3)
CAMS 2161	Multimedia Journalism Practicum (1 hour x 3 Semesters)*
CAMS 3111	Editing (3)
CAMS 4121	Computer Assisted Reporting (3)

Select three (3) credit hours:

CAMS 3131	Photojournalism (3)
CAMS 3141	Video Storytelling (3)

Digital Media Production (21 credit hours)

CAMS 1101	Introduction to Convergent Media (3)
CAMS 2151	Multimedia Writing (3)
CAMS 3131	Photojournalism (3)
CAMS 3141	Video Storytelling (3)
CAMS 2161	Practicum (1 hour x 3 Semesters)

Select six (6) credit hours:

CAMS 1401	Social Media Principles (3)
CAMS 4051	Independent Study (1-3 Hours)
CAMS 4501	Media Management (3)
DSGN 1301	Typography (3)
TECH 1421	Web Design & Development (3)

Public Relations Minor (24 credit hours)

CAMS 1201	Introduction to Public Relations (3)
CAMS 2201	Public Relations Writing (3)
CAMS 1401	Social Media Principles (3)
CAMS 3201	Advanced Public Relations Writing (3)
CAMS 3001	Communication Research Methods (3)
CAMS 4281	Public Relations Campaigns Capstone (3)
CAMS 4201	Public Relations Case Studies (3)
CAMS 4001	Communication Law and Ethics (3)

Social Media Minor (21 credit hours)

CAMS 1401	Social Media Principles (3)
CAMS 2151	Multimedia Writing (3)
CAMS 2401	Social Media Strategies and Campaigns (3)
CAMS 3401	Digital Branding (3)

Select three (3) credit hours:

ABUS 2221	Entrepreneurship (3)
CAMS 1101	Introduction to Convergent Media (3)
CAMS 1201	Introduction to Public Relations (3)
CAMS 3001	Research Methods (3)
MRKT 3341	Marketing Research (3)
MRKT 3521	Consumer Behavior (3)

Subject - Communication and Media Studies Orientation (CAMS)

CAMS 0301 - Global Village

1 Credit Grading mode is S/U

This course will provide the students living in the Global Village with a basic understanding of what it means to live and interact with people of diverse backgrounds. Throughout the semester, students in this course will not only gain a better understanding of themselves and their role in our global society, but also of the various cultures represented by their classmates. It will combine relevant course readings, guest speakers and classroom discussion to address the topics to be covered in the course. This course may be repeated 1 time.

CAMS 1101 - Introduction to Convergent Media

3 Credits

This course begins with an overview of how we got to where we are today in a convergent media world as compared to the past century of journalism. This class combines theory and practical experience while providing students with the basic production technology necessary to design and create multimedia, primarily audio recording and editing and video shooting and editing. The Convergent Publishing course, CAMS 3131 will utilize the skills learned and take your work to the next level, The Web. Offered fall semester.

CAMS 1201 - Introduction to Public Relations

3 Credits

The role, function, and responsibilities of the public relations practitioner within organizations. Offered fall and spring semesters. Course Attributes: Integration Across Disciplines.

CAMS 1301 - Presentational Speaking

3 Credits

Basic principles of preparation, organization, and delivery of original informative and persuasive speeches. Offered fall and spring semesters. Course Attributes: Communication and Media Studies, Effective Communication Non-Writing.

CAMS 1311 - Communication in the Classroom

3 Credits

Emphasis on special audiences and situations unique to classroom teaching. Focus on interpersonal and speaking skills as they relate to interactions with students, parents, and the educational system. Offered fall and spring semesters. Course Attributes: Communication and Media Studies, Effective Communication Non-Writing.

CAMS 1401 - Social Media Principles

3 Credits

Introductory course provides an overview of social media concepts, technologies and implementation. This course will highlight evolution, theory, technology and impact of social media in a hand-on approach. Course Attributes: Communication and Media Studies, Integration Across Disciplines.

CAMS 1911 - ST-Summer Honors Institute

1 Credit Grading mode is S/U

Topics in Communication Arts and Media Studies. Enrollment is restricted to attendees of the Summer Honors Institute. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

CAMS 2101 - News Writing

3 Credits

Expansion of the basics of news reporting, including interviewing techniques and other methods of news gathering, organizing information, and copy editing. Offered fall semester. Course Attributes: Effective Communication Writing.

CAMS 2111 - Layout and Design

3 Credits

Design principles used in the printing industry and on the web, as well as coverage of basic headline and outline writing skills. Practical application of software publication tools in a computer classroom setting. Offered fall semester. Course Attributes: Effective Communication Non-Writing.

CAMS 2151 - Multimedia Writing

3 Credits

This basic introduction to media writing emphasizes the similarities in professional media writing environments while also recognizing that print, radio television, multimedia and social media writing each have special demands unique to medium and purpose. A writing exam will be given during the first week of this course. If score is not satisfactory, the course ENGL 2001, Grammar in Context, will be required to continue in major. Offered even fall semester, even years. Prerequisite(s): CAPR 1301 or COMM 130 or CAMS 1201.

CAMS 2161 - Multimedia Journalism Practicum

1 to 3 Credits Grading mode is S/U

Multimedia journalism activities in the ONU convergent newsroom including research, creation and dissemination of information across a variety of media platforms. One to three credits, depending on role, to be determined by department. Offered fall and spring semesters. This course is repeatable for a total of 6 hours.

CAMS 2201 - Public Relations Writing

3 Credits

Study of basic concepts for public relations writing projects and production of written public relations materials. The course consists of lectures, discussions, and supervised writing labs. Offered fall and spring semesters. Prerequisite(s): CAMS 1201 Minimum Grade of C or CAPR 1301 Minimum Grade of C or COMM 130 Minimum Grade of C.

CAMS 2261 - Public Relations Practicum

1 to 3 Credits

Course provides students the opportunity to experience public relations firsthand through professional involvement with service and non-profit projects. Offered fall and spring semesters. This course is repeatable for a total of 4 hours.

CAMS 2301 - Advanced Presentational Speaking

3 Credits

Emphasis on special audiences and situations unique to classroom teaching. Focus on interpersonal and speaking skills as they relate to interactions with students, parents, and the educational system. Offered fall and spring semesters. Prerequisite(s): CACS 1111 Minimum Grade of C or COMM 211 Minimum Grade of C or CAMS 1301 Minimum Grade of C. Course Attributes: Communication Studies, Effective Communication Non-Writing, Informed Ethical Responses.

CAMS 2311 - Interpersonal Communication

3 Credits

Explores issues and theories which will assist students in their abilities to interact interpersonally in personal and professional relationships. Offered fall and spring semesters. Course Attributes: Communication and Media Studies, Effective Communication Writing.

CAMS 2321 - Group Dynamics and Team Interaction

3 Credits

Group dynamics, theory, and problem solving/decision making methods are examined; emphasis on working effectively in teams and effective team interaction. Offered fall semester. Course Attributes: Communication Studies.

CAMS 2331 - Health Communication

3 Credits

Theory and practice of health communication. Examines communication between practitioner/client, in community/consumer health education, in health teams, and groups, in health care delivery systems, in support systems for caretakers and patients, and in intercultural settings. Offered fall semester. Course Attributes: Communication and Media Studies, Effective Communication Non-Writing, Integration Across Disciplines.

CAMS 2351 - Independent Study in Communication Studies

1 to 3 Credits

A topic in Communication Studies that is of particular interest to the student. Offered fall and spring semesters. This course is repeatable for a total of 24 hours. Course Attributes: Requires Department Approval.

CAMS 2361 - Communication Studies Practicum

1 to 3 Credits Grading mode is S/U

Hands-on experience learning related to a variety of areas of communication studies. Offered fall and spring semesters. This course is repeatable for a total of 5 hours. Course Attributes: Requires Instructor Approval.

CAMS 2391 - Communication Studies Special Topics

1 to 3 Credits

Course topics related to communication studies, but not part of regular curriculum. Course may be repeated, but course content must vary each time. Offered fall and spring semesters. This course is repeatable for a total of 24 hours.

CAMS 2401 - Social Media Strategy and Campaigns

3 Credits

Students will create and implement a social media campaign from planning and strategizing stage to measuring and evaluation stage. Students will set goals and objectives while determining and matching social media strategies and tactics with prioritized key publics. Offered fall semester. Prerequisite(s): CAMS 1401 Minimum Grade of C.

CAMS 3001 - Communication Research Methods

3 Credits

Research design, data collection methods, sampling techniques, tabulation, analysis and presentation of information concerning issues in communication. Provides a working knowledge of the concepts and methods of communication research. Course Attributes: Scientific and Quantitative Literacy.

CAMS 3111 - Editing

3 Credits

Expansion of the basics of news reporting, including interviewing techniques and other methods of newsgathering, organizing information, and copyediting. Offered fall semester.

CAMS 3121 - Convergent Publishing

3 Credits

This course offers students a hands-on opportunity to work in a multimedia newsroom, where they will report for radio/TV, print journalism, and online. Press releases will also be generated. Students will work in teams covering the news, with each team taking an approach that is targeted toward their media outlet (web, newspaper or radio/TV). Students will be introduced to the basics of designing pages for the web using WordPress. This course builds on the skills learned in CAMS 1101. Offered spring semester. Prerequisite(s): CAMS 1101 and CAMS 2101.

CAMS 3131 - Photojournalism

3 Credits

Focuses on the art of digital news photography, and covers basic instruction in photography and lighting, as well as the types of photography found in the news, specifically sports coverage, feature shots, and straight news. Camera provided. Open to Communication and Media Studies Department majors. Others by permission of the department. Offered fall semesters. Course Attributes: Effective Communication Non-Writing, Informed Responses-Aesthetics.

CAMS 3141 - Video Storytelling

3 Credits

Advanced course in video journalism designed to give the student the ability to communicate in the Video Age-whether for television, the web, public relations, professional associations, nonprofits or social networking. This course concentrates on video storytelling to emphasize the communication of ideas, along with the technical knowledge of shooting and editing video. Must be enrolled in the Communication and Media Studies Department as a major or minor or have approval from the department to enroll in this course. Offered fall semester, alternating years.

CAMS 3171 - Multimedia Journalism Internship

1 to 3 Credits Grading mode is S/U

Provides practical experience outside the classroom and enhances the students professional interests. Courses appropriate for the internship required. Offered fall and spring semesters. This course is repeatable for a total of 15 hours.

CAMS 3201 - Advanced Public Relations Writing

3 Credits

The course presents opportunities for research, indentifying and writing public affairs columns, editorials, features, and position papers for use in the public relations arena. Offered fall semester. Prerequisite(s): CAMS 2201 Minimum Grade of C or CAPR 2361 Minimum Grade of C or COMM 236 Minimum Grade of C.

CAMS 3211 - Issues in Public Relations

3 Credits

Current topics in the field including but not limited to: the role of public relations in organizational decision making, ethics, and special practice areas. Offered spring semester. Unlimited repeats permitted. Course Attributes: Informed Ethical Responses.

CAMS 3271 - Public Relations Internship

1 Credit

A skills course blending classroom theory with practical experience through working in an outside organization. Offered fall and spring semesters. This course is repeatable for a total of 12 hours.

CAMS 3301 - Interviewing

3 Credits

Basic principles and structures of interviewing are examined and applied to interview situations such as employment, performance/appraisal, journalism, counseling, etc. Offered fall semester. Course Attributes: Communication and Media Studies.

CAMS 3311 - Cross-Cultural Communication

3 Credits

Equips students with an awareness of the social construction of values, cognitions, performances across cultural lines. Familiarization with major theories, concepts, and skills cultural adaptation and identity management. Offered fall semester. Course Attributes: Communication and Media Studies, Diversity-Human Interaction.

CAMS 3321 - Organizational Communication

3 Credits

Major organization and communication theories and their practical applications for effective communication within organizations. Communication processes, various roles and relationships in organizations, leadership communication, ethics, and problematic communication situations. Offered fall semester. Course Attributes: Communication and Media Studies.

CAMS 3331 - Communication Theory

3 Credits

In depth examination and application of communication theories about the nature and dynamics of human communication/interaction. Course Attributes: Communication Studies.

CAMS 3371 - Communication Studies Internship

1 to 9 Credits Grading mode is S/U

A supervised program of experiences applying discipline related theories and practices to a working experience. This course is repeatable for a total of 9 hours. Course Attributes: Requires Department Approval.

CAMS 3401 - Digital Branding

3 Credits

Building on previous semesters work, creating a fully functional website integrating components of previous social media work (i.e. podcasts, YouTube videos, infographs). Focus will be on application of social media concepts and application, creating brand strategy with heavy reliance on social media as the foundation way of building and maintaining relationships. Offered spring semester. Prerequisite(s): CAMS 1401 Minimum Grade of C.

CAMS 4001 - Communication Law and Ethics

3 Credits

Freedom of speech and press with particular emphasis on major legal issues confronting media practitioners; introduction to such areas of law as censorship, libel, invasion of privacy, access to information, regulation of electronic and print media and commercial speech. Offered spring semester, alternating years.

CAMS 4121 - Computer Assisted Reporting

3 Credits

The fundamentals of computer-assisted reporting using public documents, records and or databases in order to gather, organize, evaluate data to write objective reports in accepted journalistic style across several media platforms.

CAMS 4181 - Multimedia Journalism Capstone

3 Credits

Designed for students seeking careers in print, broadcast, and online journalism. Provides information and instruction on skills, self-assessment, job procurement processes and procedures, career field expectations. The course requires production of a professional portfolio of journalism works and completion of a comprehensive senior journalism project. Offered fall and spring semesters. Course Attributes: Requires Instructor Approval.

CAMS 4191 - Special Topics in Multimedia Journalism

1 to 3 Credits

May be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

CAMS 4201 - Public Relations Case Studies

3 Credits

Public relations case studies concerning problems in industry, business, education, government, social welfare, and trade associations. Offered spring semesters. Course Attributes: Informed Ethical Responses.

CAMS 4281 - Publicity, Media & Campaigns

1 to 2 Credits

Public Relations Capstone Course. Students will take 1 credit hour in the fall of their senior year and 2 credit hours in the spring of their senior year. Prerequisite(s): CAMS 3201 Minimum Grade of C or CAPR 3361 Minimum Grade of C or COMM 336 Minimum Grade of C. This course is repeatable for a total of 3 hours. Course Attributes: Critical and Creative Thinking, Effective Communication Writing, Integration Across Disciplines.

CAMS 4291 - Public Relations Special Topics

3 Credits

Special Topics in Public Relations This course is repeatable for a total of 12 hours.

CAMS 4301 - Film Study and Analysis

3 Credits

In depth exploration of the rhetorical principles found in popular contemporary films that define social trends, analyze social issues, and serve as metaphors for the human experience. Offered alternate fall semesters. Course Attributes: Communication and Media Studies, Informed Responses-Aesthetics.

CAMS 4311 - Political Communications and Campaigns

3 Credits

Political communication and the means to assess political activities through rhetorical methods of analysis. Methods may include those presented by classical and contemporary theorists such as Aristotle, Lloyd Bitzer, and Kenneth Burke. Offered alternate fall semesters. Course Attributes: Communication Studies, Effective Communication Non-Writing, Integration Across Disciplines.

CAMS 4351 - Independent Study in Communication Studies

1 to 3 Credits

A topic in Communication Studies that is of particular interest to the student. Offered fall and spring semesters. This course is repeatable for a total of 24 hours. Course Attributes: Requires Department Approval.

CAMS 4381 - Communication Studies Capstone

1 to 2 Credits

A multi-component project completed during the senior year. Integration of skills and experiences acquired during study to complete the major, project and design and planning. Offered fall semester. Must be enrolled in one of the following Major fields of study: Communication Studies, Multimedia Journalism, Public Relations. This course is repeatable for a total of 3 hours. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

CAMS 4391 - Communication Studies Special Topics

1 to 3 Credits

Course topics related to communication studies, but not part of the regular curriculum. Course may be repeated, but course content must vary each time. Offered fall and spring semesters. This course is repeatable for a total of 24 hours.

CAMS 4501 - Multimedia Management

3 Credits

A comprehensive look at media management, including such topics as the basic schools of management theory; specific organizational structures for various media such as radio, TV, cable TV, newspaper, and Public Broadcasting; Regulations governing media, Broadcast sales, research and ratings; and employment opportunities in media. Offered spring semester, alternating years.

DEPARTMENT OF EDUCATION AND CENTER FOR TEACHER EDUCATION

Associate Professors Kieffer; **Assistant Professors** Akyeampong, Garlough (*Chair*), Goss; **Lecturers** Osborn

Center for Teacher Education The Center includes the Education faculty above plus the following faculty from other areas of Ohio Northern University:

Assistant Dean Zechman; **Professors** Alexander, C. Bates, Casey, Pinkney, Roepke, Robeson, Rouch; **Associate Professors** Ayling, S. Bates, Crawford, Kanwit, Mager, Swanson; **Assistant Professors** Durand, R. Miller; **Visiting Instructor** Poelzler-Kamatani, S. Putt

Mission Statement

The Center for Teacher Education is a community of dedicated faculty committed to providing quality instruction in the knowledge of the learner, knowledge of the discipline, and knowledge of pedagogy. When these areas of knowledge are integrated, the end result is an enabling teacher who can prepare students with diverse backgrounds and abilities to contribute both individually and cooperatively to the common good of the larger society.

Vision Statement

In collaboration with the broader Ohio Northern community and the professional community in schools surrounding our university, the Center for Teacher Education seeks to prepare educators who are able to meet the challenges of teaching in the twenty-first century. Our shared vision has two central components. The first relates to the nature of the learner and the second to our role in educational change and understanding.

1. We envision an educational system that prepares a citizenry that is made up of diverse individuals who are lifelong learners and who contribute individually and collectively to the common good of the larger society.
2. It is also the vision of the Center for Teacher Education to prepare teachers who are enablers. By this we mean that an ONU teacher education candidate will be the type of educator who uses knowledge of the learner, knowledge of the appropriate discipline, and knowledge of pedagogy to create environments and circumstances that enable all students to become autonomous learners. This requires the establishment of teaching methods, strategies and environments that contribute to all students' physical, cognitive, and socio-emotional growth and well-being.

Accreditation

The Center for Teacher Education is currently accredited by the National Council for Accreditation of Teacher Education (NCATE) and is working toward accreditation by the Council for Educator Preparation (CAEP). In addition, the Teacher Education Programs is approved by the Chancellor of the Ohio Board of Regents as meeting curriculum and experience requirements for the initial Ohio teaching license. All requirements are subject to change and approval by these two entities.

Majors and Degrees Offered

Early Childhood Education Major (BA, BS)
Middle Childhood Education Major (BA, BS)

Licensure Offered

An Intervention Specialist license is available to EC/MC majors (admission to Teacher Education required) in conjunction with Bluffton University. The Center for Teacher Education offers the following teacher licensure programs for Early Childhood, Middle Childhood, Adolescent/Young Adult (AYA) and Multi-age (MA) teacher candidates:

- Early Childhood (grades PK-3)
- Early Childhood Generalist Endorsement (grades 4-5)
- Middle Childhood (grades 4-9)
- Middle Childhood Generalist Endorsement (grades 4-6)
- AYA Integrated Language Arts (grades 7-12)
- AYA Integrated Mathematics (grades 7-12)
- AYA Integrated Social Studies (grades 7-12)
- AYA Integrated Science (grades 7-12)
- AYA Life Sciences (grades 7-12)
- AYA Physical Sciences: Physics and Chemistry (grades 7-12)
- AYA Physical Sciences: Physics (grades 7-12)
- AYA Physical Sciences: Chemistry (grades 7-12)
- MA Music (grades PK-12)
- MA Visual Arts (grades PK-12)
- MA Foreign Languages (French, Spanish or German) (grades PK-12)
- MA Technology (grades 4-12)

Those candidates pursuing the AYA or MA programs must complete the major and degree requirements in the subject area from the appropriate ONU department and complete the professional education coursework listed below.

Admission Requirements

Teacher education candidates typically apply for formal admission to the Teacher Education Program during the sophomore year. Requirements include a minimum 2.50 grade point average, passage of the Praxis™ Core Academic Skills for Educators examination, a grade of 'C' or higher in specified prerequisite courses, and favorable recommendations. Candidates should contact the Center for Teacher Education office for complete requirements and application procedures. Applications for admission are considered by the Center faculty.

Special Programs

Student Teaching At-home and Abroad

The Teacher Education Program culminates with a twelve-week (minimum) supervised student teaching experience. Although most candidates student teach near Ohio Northern University, they may apply for remote student teaching supervision outside of a 40 mile radius from ONU. Additionally, candidates are strongly encouraged to participate in study abroad, or other relevant experiences such as the Urban Experience at any point in the program.

Major Course Requirements

Requirements are listed by program and degree. The teacher candidate must be formally admitted to the Teacher Education Program to take any course marked with an asterisk (*).

Field Experience

All teacher candidates complete required coursework as well as extensive field experience in which the candidate collaborates with university faculty and PK-12 classroom teachers and students to develop the knowledge, skills, and dispositions necessary to become a competent teacher. Field experience requirements differ by program and are available in the Education office.

Early Childhood Education (PK-3) Major (63 credit hours)

EDUC 1151	Culture and Schooling (3) (20 hours field)
ECED 2051	Children's Literature (3) (10 hours field)
EDUC 2101	Exceptional Learners (3) (20 hours field)
ECED 2301*	Early Childhood Mathematics Methods (3) (20 hours field)
ECED 2401	Introduction to Early Childhood Education (3) (10 hours field)
ECED 2671*	Educational Psychology (3) (10 hours field)
EDUC 3001	Foundations of Literacy (3)

ECED 3051*	Social Studies in Early Childhood Education (3) (10 hours field)
EDUC 3121	Teaching Phonics (3) (10 hours field)
ECED 3151*	Teaching Science as Inquiry (3) (10 hours field)
ECED 3181	EC Classroom Assessment (3) (10 hours field)
EDUC 3201*	Instructional Media and Educational Technologies (3)
EDUC 3221*	Integrated Language Arts (3) (20 hours field)
ECED 3351*	Visual Arts in Early Childhood Education (2) (10 hours field)
EDUC 3421*	Literacy Across the Content Areas (3) (10 hours field)
ECED 3551*	Music and Movement in Early Childhood Education (2) (10 hours field)
EDUC 4001*	Assessment and Evaluation of Reading Instruction (3) (10 hours field)
EDUC 4451*	Leadership Seminar in Education (2)
EDUC 4701*	Student Teaching/EC/MC (12)

In addition, each Early Childhood Education major must complete the selected coursework below to meet the requirements of either the BA or BS degree for the Getty College of Arts & Sciences.

BA Degree General Education Requirements (57 credit hours)

TREX 1001	Transitions Experience (3)
EXDS 2001	Extra-disciplinary Seminar (3)
ART 1651	Visual Literacy (3)
CAMS 1311	Communication in the Classroom (3)
HIST XXX1	History elective (3)
MATH 1661	Fundamental Mathematics 1 (3)
MATH 1671	Fundamental Mathematics 2 (3)
PHIL 2401	Professional Ethics (3)
PSYC 1001	Psychology (3)
PSYC 2161	Child Psychology (3)
RELG XXX1	Religion elective (3)
SOC XXX1	Sociology elective (3)
ENGL 1221	Writing Seminar (3)

Select one:

BIOL 1031	Life/Earth Sciences for EC/MC (3)
BIOL 2011	Environmental Issues (3)
CHEM 1001	Chemistry in Society (3)
GEOL 2801	Geology (3)
PHYS 1001	Conceptual Physics (3)
PHYS 1051	Planetary Astronomy (3)

Select one:

GEOG 2261	World Regional Geography (3)
GEOG 2371	Physical Geography (3)

Select one:

ENGL XXX1	English literature elective (3)
MLNG XXX1	Modern Language literature elective (3)

Select one:

MUSC 1001	Music Appreciation (3)
MUSC 2201	Non-western Music (3)

One year of a modern language (or equivalent through placement) (6)

Select one language:

ARAB 1011	Elementary Arabic 1 (3)
ARAB 1021	Elementary Arabic 2 (3)
	or
CHIN 1011	Elementary Chinese 1 (3)
CHIN 1021	Elementary Chinese 2 (3)
	or
FREN 1011	Elementary French 1 (3)
FREN 1021	Elementary French 2 (3)
	or
GERM 1011	Elementary German 1 (3)
GERM 1021	Elementary German 2 (3)
	or
JAPN 1011	Elementary Japanese 1 (3)
JAPN 1021	Elementary Japanese 2 (3)
	or
RUSS 1011	Elementary Russian 1 (3)

RUSS 1021 Elementary Russian 2 (3)
or
SPAN 1011 Elementary Spanish 1 (3)
SPAN 1021 Elementary Spanish 2 (3)

BS Degree General Education Requirements (54 credit hours)
 TREX 1001 Transitions Experience (3)
 EXDS 2001 Extra-disciplinary Seminar (3)
 ART 1651 Visual Literacy (3)
 CAMS 1311 Communication in the Classroom (3)
 HIST XXX1 History elective (3)
 MATH 1661 Fundamental Mathematics 1 (3)
 MATH 1671 Fundamental Mathematics 2 (3)
 PHIL 2401 Professional Ethics (3)
 PSYC 1001 Psychology (3)
 PSYC 2161 Child Psychology (3)
 SOC XXX1 Sociology elective (3)
 One additional mathematics or science elective (3).
 ENGL 1221 Writing Seminar (3)

Select one:
 BIOL 1031 Life/Earth Sciences for EC/MC (3)
 BIOL 2011 Environmental Issues (3)

Select one:
 CHEM 1001 Chemistry in Society (3)
 GEOL 2801 Geology (3)
 PHYS 1001 Conceptual Physics (3)
 PHYS 1051 Planetary Astronomy (3)

Select one:
 GEOG 2261 World Regional Geography (3)
 GEOG 2371 Physical Geography (3)

Select one:
 ENGL XXX1 English literature elective (3)
 MLNG XXX1 Modern Language literature elective (3)

Select one:
 MUSC 1001 Music Appreciation (3)
 MUSC 2201 Non-western Music (3)

Early Childhood Generalist Endorsement (12 credit hours) This optional Early Childhood Generalist Endorsement provides the coursework for an Early Childhood Education major (grades PK-3) to add grades 4-5 to the Ohio teaching license.

MCED 2601 Introduction to Middle Childhood Education (3)
(10 hours field)
 MCED 3091* Middle School Science Methods (3) (20 hours field)
 MCED 3111* Middle School Social Studies Methods (3) (20 hours field)

GEOG 2261 World Regional Geography
or
 GEOG 2271 Physical Geography (3)

Middle Childhood Education (4-9) Major (41 credit hours)
 EDUC 1151 Culture and Schooling (3) (20 hours field)
 EDUC 2101 Exceptional Learners (3) (20 hours field)
 EDUC 3001 Foundations of Literacy (3)
 EDUC 3121 Teaching Phonics (3) (10 hours field)
 EDUC 3201* Instructional Media and Educational Technologies (3)
 EDUC 3421* Literacy Across the Content Areas (3) (10 hours field)
 EDUC 4001* Assessment and Evaluation of Reading Instruction (3) (10 hours field)
 EDUC 4451* Leadership Seminar in Education (2)
 EDUC 4701* Student Teaching/EC/MC (12)
 MCED 2601 Introduction to Middle Childhood Education (3) (10 hours field)
 MCED 2671 Educational Psychology and MC Assessment (3) (10 hours field)

In addition, all Middle Childhood Education majors must select two of the following four areas in which to concentrate.

Middle Childhood Language Arts/Reading (24 credit hours)
 CAMS 1311 Communication in the Classroom (3)
 EDUC 3221* Integrated Language Arts (3) (20 hours field)
 ENGL 2001 Grammar in Context (3)
 ENGL XXX1 Literature elective (3)
 ENGL XXX1 Writing elective (3)
 MCED 3051* Adolescent Literature (3)
 TATH 1051 Introduction to the Performing Arts (3)
 ENGL 1221 Writing Seminar (3)

Middle Childhood Mathematics (25 credit hours)
 MATH 1661 Fundamental Mathematics I (3)
 MATH 1671 Fundamental Mathematics 2 (3)
 MATH 1201 Mathematics for Liberal Arts (3)
 MATH 2011 Mathematics History (3)
 MCED 3081* Middle Childhood Mathematics Methods (3) (20 hours field)

Select one:
 MATH 1251 College Algebra (3)
 MATH 1401 Functions for Science/Tech (3)

Select one:
 MATH 1431 Calculus for Science and Technology (3)
 MATH 1461 Calculus for Life Sciences (3)
 MATH 1611 Calculus w/Precalculus (4)
 MATH 1631 Calculus 1 (4)

Select one:
 STAT 1311 Introduction to Statistical Reasoning (3)
 STAT 1561 Statistics for Professionals I (3)

Middle Childhood Science (24 credit hours)
 BIOL 1031 Life/Earth Sciences for EC/MC (3)
 BIOL 2011 Environmental Issues (3)
 CHEM 1001 Chemistry in Society (3)
 GEOL 2801 Geology (3)
 MCED 3091* Middle Childhood Science Methods (3) (20 hours field)
 PHYS 1001 Conceptual Physics (3)
 PHYS 1051 Planetary Astronomy (3)
 One additional science elective (3)

Middle Childhood Social Studies (24 credit hours)
 BIZ 2021 Microeconomics (3)
 HIST 1151 World Civilizations I (3)
 HIST 1161 World Civilizations II (3)
 HIST 2141 U.S. History to 1877 (3)
 HIST 2151 U.S. History since 1877 (3)
 MCED 3111* Middle Childhood Social Studies Methods (3) (20 hours field)
 PLSC 1011 Introduction to American Politics (3)

Select one:
 GEOG 2261 World Regional Geography (3)
 GEOG 2371 Physical Geography (3)

Finally, each Middle Childhood Education major must complete the selected coursework below to meet the requirements of either the BA or BS degree for the Getty College of Arts & Sciences.

BA Degree General Education Requirements (48 credit hours)
 TREX 1001 Transitions Experience (3)
 EXDS 2001 Extra-disciplinary Seminar (3)
 ENGL 1221 Writing Seminar (3)
 ART 1651 Visual Literacy (3)
 CAMS 1311 Communication in the Classroom (3)
 HIST XXX1 History elective (3)

PHIL 2401 Professional Ethics (3)
 PSYC 1001 Psychology (3)
 PSYC 2171 Adolescent Psychology (3)
 RELG XXX1 Religion elective (3)

Select one:
 BIOL 1031 Life/Earth Sciences for EC/MC (3)
 BIOL 2011 Environmental Issues (3)
 CHEM 1001 Chemistry in Society (3)
 GEOL 2801 Geology (3)
 PHYS 1001 Conceptual Physics (3)
 PHYS 1051 Planetary Astronomy (3)

Select one:
 MATH 1661 Fundamental Mathematics 1 (3)
 MATH 1671 Fundamental Mathematics 2 (3)
 ENGL 1221 Writing Seminar (3)

Select one:
 ENGL XXX1 English literature elective (3)
 MLNG XXX1 Modern Language literature elective (3)

Select one:
 MUSC 1001 Music Appreciation (3)
 MUSC 2201 Non-western Music (3)

One year of a modern language (or equivalent through placement) (6)

Select one language:

ARAB 1011 Elementary Arabic 1 (3)
 ARAB 1021 Elementary Arabic 2 (3)

or
 CHIN 1011 Elementary Chinese 1 (3)
 CHIN 1021 Elementary Chinese 2 (3)

or
 FREN 1011 Elementary French 1 (3)
 FREN 1021 Elementary French 2 (3)

or
 GRMN 1011 Elementary German 1 (3)
 GRMN 1021 Elementary German 2 (3)

or
 JAPN 1011 Elementary Japanese 1 (3)
 JAPN 1021 Elementary Japanese 2 (3)

or
 RUSS 1011 Elementary Russian 1 (3)
 RUSS 1021 Elementary Russian 2 (3)

or
 SPAN 1011 Elementary Spanish 1 (3)
 SPAN 1021 Elementary Spanish 2 (3)

BS Degree General Education Requirements (45 credit hours)

TREX 1001 Transitions Experience (3)
 EXDS 2001 Extra-disciplinary Seminar (3)
 CAMS 1311 Communication in the Classroom (3)
 HIST XXXX History elective (3)
 MATH 1661 Fundamental Mathematics 1 (3)
 MATH 1671 Fundamental Mathematic 2 (3)
 PHIL 2401 Professional Ethics (3)
 PSYC 1001 Psychology (3)
 PSYC 2171 Adolescent Psychology (3)
 One additional math or science elective (3)
 ENGL 1221 Writing Seminar (3)

Select one:
 BIOL 1031 Life/Earth Sciences for EC/MC (3)
 BIOL 2011 Environmental Issues (3)

Ohio Northern University

Praxis II Pass-rate Data: Regular Teacher Preparation Program

Academic Year 2013-14 Number of Program Completers¹: 30

Type of Assessment	# Taking Praxis II ²	# Passing Praxis II ³	ONU Pass Rate (%)
Professional Knowledge			
Principles of Learning and Teaching EC	8	***	***
Principles of Learning and Teaching 5-9	3	***	***
Principles of Learning and Teaching 7-12	10	9	90%
Academic Content Areas			
Education of Young Children	7	***	***
English Language, Literature & Composition Content Knowledge	1	***	***
Middle School English Language Arts	1	***	***
Mathematics: Content Knowledge	3	***	***
Middle School Mathematics	1	***	***
Social Studies: Content Knowledge	3	***	***
Middle School Social Studies	0	***	***
Music: Content Knowledge	3	***	***
Art: Content Knowledge	0	***	***
Biology: Content Knowledge	1	***	***
Middle School Science	1	***	***
Physical Education: Content Knowledge	1	***	***
Health Education	1	***	***
Chem Physics and General Science	1	***	***
Aggregate Data			
All Program Completers 2013-14⁵	30	26	87%
All Program Completers 2012-13⁵	36	36	100%
All Program Completers 2011-12⁵	24	24	100%

Contextual Information

Average number of weeks of supervised student teaching	12	Student teacher/faculty ratio	2.3:1
Average number of student teaching hours per week	40	Full-time faculty in professional education	6
Average number of hours required for student teaching	480	Part-time faculty in professional education	7
Total number of students in supervised student teaching	30	who work full-time in the institution	1
Number of faculty members who supervised student teachers	20	Part-time faculty in professional education not otherwise employed by the institution	1

¹The number of program completers found, matched, and used in the passing rate calculation will not equal the sum of the column label "Number Taking Assessment" since a completer can take more than one assessment.

²Numbers of completers who took one or more tests in a category and within their area of specialization.
³Number who passed all tests they took within the category and within their area of specialization.

⁴The national passing rate is calculated at Ohio's cut schools, which are among the highest in the nation. For instance, Ohio requires the highest cut score in Principles of Learning and Teaching 5-9 and ranks second in Principles of Learning and Teaching 7-12.

⁵Numbers of completers who successfully completed one or more tests across all categories used by the state for licensure and the total pass rate.

*** No pass rate percentage is calculated when fewer than 10 teacher candidates take the Praxis II test.

For more information, visit <http://title2.ed.gov/View.asp>.

Select one:
CHEM 1001 Chemistry in Society (3)
GEOL 2801 Geology (3)
PHYS 1001 Conceptual Physics (3)
PHYS 1051 Planetary Astronomy (3)

Select one:
ENGL XXX1 English literature elective (3)
MLNG XXX1 Modern Language literature elective (3)

Select one:
ART 1651 Visual Literacy (3)
MUSC 1001 Music Appreciation (3)
MUSC 2201 Non-western Music (3)

Middle Childhood Generalist Endorsement (6 credit hours each) This optional Middle Childhood Generalist Endorsement provides the coursework for a Middle Childhood Education major (grades 4-9) to add grades 4-6 non-concentration areas to the Ohio teaching license.

Middle Childhood Generalist Language Arts/Reading
EDUC 3221* Integrated Language Arts (3) (20 hours field)
MCED 3051* Adolescent Literature (3)

Middle Childhood Generalist Mathematics
MATH 1671 Fundamental Mathematics II (3)
MCED 3081* Middle Childhood Mathematics Methods (3) (20 hours field)

Middle Childhood Generalist Science
One additional science course (3 credit hours) chosen from the following (one biological science required, one physical science required)

BIOL 1031 Life/Earth Sciences for EC/MC (3)
BIOL 2011 Environmental Issues (3)
CHEM 1011 Chemistry in Society (3)
GEOL 2801 Geology (3)
PHYS 1001 Conceptual Physics (3)
PHYS 1051 Planetary Astronomy (3)

MCED 3091* MC Science Methods (3) (20 hours field)

Middle Childhood Generalist Social Studies
MCED 3111* Middle School Social Studies Methods (3) (20 hours field)
GEOG 2261 World Regional Geography (3)
or
GEOG 2371 Physical Geography (3)

Adolescent/Young Adult (AYA) Professional Education Requirements (41 credit hours)

Candidates pursuing AYA licensure must complete the appropriate major and general requirements within the subject area department. In addition, the following professional education requirements must be completed:

CAMS 1311 Communication in the Classroom (3)
PSYC 2171 Adolescent Psychology (3)
EDUC 1151 Culture and Schooling (3) (20 hours field)
EDUC 2101 Exceptional Learners (3) (20 hours field)
EDUC 2681 Curriculum and Assessment (3) (20 hours field)
EDUC 3201 Instructional Media and Educational Technologies (3)
EDUC 3451* Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4401* Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4451* Leadership Seminar in Education (2)
EDUC 4721* Student Teaching/AYA/MA (12)

Select one:
EDUC 4511* Integrated Science Methods (3) (20 hours field)
EDUC 4521* Integrated Language Arts Methods (3) (20 hours field)
EDUC 4531* Integrated Social Studies Methods (3) (20 hours field)
EDUC 4541* Integrated Mathematics Methods (3) (20 hours field)

Multi-age (MA) Professional Education

Requirements (41 credit hours)

This section does not cover MA Music Education, Technology Education or Engineering Education. For those requirements, please see the respective sections.

Candidates pursuing MA licensure must complete the appropriate major and general requirements within the subject area department. In addition, the following professional education requirements must be completed:

CAMS 1311 Communication in the Classroom (3)
PSYC 2151 Development Across the Lifespan (3)
EDUC 1151 Culture and Schooling (3) (20 hours field)
EDUC 2101 Exceptional Learners (3) (20 hours field)
EDUC 2681 Curriculum and Assessment (3) (20 hours field)
EDUC 3201 Instructional Media and Educational Technologies (3)
EDUC 3451* Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4401* Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4451* Leadership Seminar in Education (2)
EDUC 4741* Student Teaching/MA (12)

Select one:
EDUC 4561* Integrated Modern Language Methods (3) (20 hours field)
EDUC 4571* Integrated Art Methods (3) (20 hours field)
EDUC 4601* Integrated Health Methods (3) (20 hours field)
EDUC 4611* Integrated Physical Education Methods (3) (20 hours field)

Multi-age (MA) Music Education Professional Education

Requirements (38 credit hours)

Candidates pursuing Music licensure must complete the appropriate major and general requirements within the subject area department. In addition, the following professional education requirements must be completed:

CAMS 1311 Communication in the Classroom (3)
PSYC 2151 Developmental Psychology (3)
EDUC 1151 Culture and Schooling (3) (20 hours field)
EDUC 2101 Exceptional Learners (3) (20 hours field)
EDUC 2681 Curriculum and Assessment (3) (20 hours field)
EDUC 3451* Literacy Across the Content Areas AYAMA (3) (20 hours field)
EDUC 4401* Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4591* Integrated Music Methods (3) (20 hours field)
EDUC 4451* Leadership Seminar in Education (2)
EDUC 4741* Student Teaching/MA (12)

Multi-age (MA) Technology Education Professional Education

Requirements (38 credit hours)

Candidates pursuing Technology licensure must complete the appropriate major and general requirements within the subject area department. In addition, the following professional education requirements must be completed:

CAMS 1311 Communication in the Classroom (3)
PSYC 2151 Developmental Psychology (3)
EDUC 1151 Culture and Schooling (3) (20 hours field)
EDUC 2101 Exceptional Learners (3) (20 hours field)
EDUC 2681 Curriculum and Assessment (3) (20 hours field)
EDUC 3041* Strategies for Technology Education (3) (18 field + 6 hours)
EDUC 3451* Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4451* Leadership Seminar in Education (2)
EDUC 4581* Organization and Methods for Technology Education (3) (18 field + 6 hours)
EDUC 4741* Student Teaching/MA (12)

Subject- Early Childhood Education (ECED)

ECED 2051 - Children's Literature in the Early Childhood Classroom *3 Credits*

Selecting and evaluating quality children's literature. Examination of works of notable authors and illustrators, concepts of diversity, strategies for integrating various genre into the curriculum, story-telling, and helping children respond to literature. Offered alternate spring semesters. 10 hours field experience. Course Attributes: Diversity-Human Interaction.

ECED 2301 - Early Childhood Mathematics Methods *3 Credits*

Content, strategies, materials, technology and assessment from a constructivist perspective in the early childhood mathematics classroom. Offered alternate fall semesters. 20 hours field experience. Prerequisite(s): MATH 1661 and MATH 1671.

ECED 2401 - Introduction to Early Childhood Education *3 Credits*

Introduction to the profession with emphasis on issues, ethics, developmentally appropriate practices in early childhood education including creating effective family and community partnerships. 2.50 GPA and Praxis I or equivalent required. Offered alternate fall semester. 10 Hours field experience. Prerequisite(s): EDUC 1151. Course Attributes: Informed Ethical Responses.

ECED 2671 - Educational Psychology *3 Credits*

Psychological theories, concepts, and principles applied to teaching and learning. Learning processes, motivation, development, social processes, individual differences, and instruction practices. Case study applications. Offered alternate fall semesters. 10 hours field experience. Course Attributes: Requires CTE admission.

ECED 2991 - Independent Study *1 to 3 Credits*

The independent study designation to be used as a prefix for the specific course taken independently. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted.

ECED 3051 - Social Studies in Early Childhood Education *3 Credits*

An integrated approach to the planning, processes and content of the social studies based on developmental characteristics of the preschool/primary child. Offered alternate spring semesters. 10 hours field experience. Course Attributes: Requires CTE admission.

ECED 3151 - Teaching Science as Inquiry *3 Credits*

Constructivist approach to science education methods and materials in the early childhood classroom. Focus on standards, inquiry, safety, assessment, and incorporation of technology with content of a general science curriculum. Offered alternate spring semesters. 10 hours field experience. Course Attributes: Requires CTE admission.

ECED 3181 - Education Assessment for Early Childhood *3 Credits*

Concepts in developmentally appropriate assessment with emphasis on crafting assessments to inform teaching and learning aligned with state and national standards. Development and appropriate use of traditional and alternative assessments, evaluating student progress, applying technologies, interpreting and using standardized tests and federal and state assessment requirements/reporting. Offered fall semester. 10 hours field experience. Prerequisite(s): EDUC 1151.

ECED 3351 - Visual Arts in Early Childhood Education *2 Credits*

An integrated, constructivist approach to curriculum and pedagogy for teaching the visual arts based on developmental characteristics of the preschool-primary child. Offered alternate spring semesters. 10 hours field experience. Course Attributes: Requires CTE admission.

ECED 3551 - Music and Movement in Early Childhood Education *2 Credits*

An integrated, constructivist approach to incorporating music into the PreK and K-3 primary curricula. Elements of music and movement applied to developmentally appropriate practice. Offered alternate fall semesters. 10 hours field experience. Course Attributes: Requires CTE admission.

ECED 3901 - Special Topics in Early Childhood Education *1 to 3 Credits*

Selected special topics in early childhood education. Can be repeated as the topic varies. Unlimited repeats permitted.

ECED 4991 - Independent Study *1 to 3 Credits*

The independent study designation to be used as a prefix for a specific course taken independently. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted.

Subject- Education (EDUC)

EDUC 1151 - Culture and Schooling *3 Credits*

The philosophical, historical, and sociological aspects of the American public school experience. Included is the impact that cultural factors have on students, teachers, and on the development and enactment of the school curriculum. Offered fall and spring semesters. 20 hours field experience. Course Attributes: Diversity-Human Interaction.

EDUC 2101 - Exceptional Learners *3 Credits*

Understanding the varying characteristics and needs of exceptional individuals; legal requirements, bilingual/multicultural considerations, least restrictive environment and programming alternatives developed to meet student needs. Offered fall and spring semesters. 20 hours field experience. Prerequisite(s): EDUC 1151.

EDUC 2211 - Child and Adolescent Development and Diversity *2 Credits*

Designed as a study of the characteristics, problems, promises and issues of adolescence and will focus on aspects of adolescent development and the possible special needs of adolescents that are particularly relevant to persons who will be professionally involved with both adolescents and their families. Includes a survey of the physical, intellectual, social and emotional development of the typical adolescent and also provides a study of the unique needs and characteristics of adolescents who are at risk or who have disabilities. Students will have the opportunity to observe and interact with adolescents within middle and high school settings. Topics to be covered in the course: physical, intellectual, emotional and social development; becoming a change agent in the secondary classroom; collaboration and consultation; holistic programs; regular and special education programs in middle schools and high schools; diverse populations in middle/secondary schools; family-school partnerships; and sociocultural awareness. 4 field hours. Offered at Bluffton University. Prerequisite(s): EDUC 1151.

EDUC 2311 - Diagnosis and Educational Planning for Special Needs Children *3 Credits*

This course focuses on information and practical experiences relating to assessment and remediation of children with mild/moderate educational needs. Topics to be covered include formal and informal criterion-referenced assessment, individualized educational plans, multidisciplinary approaches, parental roles, report writing, collaboration. 20 clinical hours. Offered at Bluffton University. Prerequisite(s): EDUC 2101. Must be enrolled in one of the following Classifications: Junior, Senior.

EDUC 2351 - Language Development for Diverse Learners*3 Credits*

This course introduces speech and language acquisition of the typically and atypically developing child. It also presents a survey of various disorders and their effects on receptive (listening and reading) and expressive (oral and written) language functions and learning. Students become familiar with the diagnostic tools and the professional vocabulary in order to communicate effectively with other professionals. Emphasis is placed on methods that the regular classroom or intervention specialist can use to communicate with and teach children with diverse learning styles in reading, writing, listening and speaking. Students become sensitive to the concerns of speech and language differences related to culture and environmental issues. 10 field hours/20 clinical hours. Offered at Bluffton University. Prerequisite(s): EDUC 2101. Must be enrolled in one of the following Classifications: Junior, Senior.

EDUC 2681 - Curriculum and Assessment*3 Credits*

General and specific topics related to curriculum development and general teaching methods, lesson and unit development, constructivist teaching, and effective classroom practices including formal and informal assessment for adolescent and multiage classrooms. 2.50 GPA and Praxis I required. Offered fall and spring semesters. 20 hours field experience. Prerequisite(s): EDUC 1151.

EDUC 2991 - Independent Study*1 to 3 Credits*

The independent study designation to be used as a prefix for the specific course taken independently. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted.

EDUC 3001 - Foundations of Literacy*3 Credits*

Theoretical orientations of the reading processes, brief history of the U.S. literacy trends, and evaluation of literacy materials in accordance with literacy theories. Offered fall semester. Prerequisite(s): EDUC 1151.

EDUC 3041 - Strategies for Technology Education*3 Credits*

Technology and technological activity to assist the synthesis of learning. The use of materials, tools and processes to enhance learning and to assist in developing interests and talents. Emphasis on STEM integration through the development of hands-on, manipulative, problem based learning strategies to be used in the classroom. Typical problems and the planning and organizing of the learning environment. Offered alternate spring semesters. 18 hours field experience. 6 hours clinical. Course Attributes: Requires CTE admission.

EDUC 3121 - Teaching Phonics*3 Credits*

Emphasis on stages of orthographic development, phonics generalizations, how to teach phonics, and word recognition skills within a structured word study methodology. Offered spring semester. 10 hours field experience. Prerequisite(s): EDUC 3001.

EDUC 3201 - Instructional Media and Educational Technologies*3 Credits*

The role that technologies play in our schools of today as well as in American society. Emphasis on technology integration in instruction including planning, selection, utilization, operation, and evaluation of hardware (computers, digital cameras, digital camcorders, digital document cameras, smart board, etc.) and software applications; culminating in the production of a multimedia project for a classroom teacher and his/her students. Offered fall and spring semesters. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

EDUC 3221 - Integrated Language Arts*3 Credits*

Strategies for integrating the language arts within a literacy program with an emphasis on the writing process, applications and conventions. Offered alternate spring semesters. 20 hours field experience. Prerequisite(s): EDUC 3001. Course Attributes: Requires CTE admission.

EDUC 3301 - Media and Young Adult*3 Credits*

Analysis of the characteristics of young adults, their information needs, materials and media, information-seeking behavior, digital media use, and impact of digital media on teaching and learning.

EDUC 3421 - Literacy Across the Content Areas*3 Credits*

Literacy connections across the curriculum including instruction methods in prereading, vocabulary, comprehension strategies, and study skills. Appropriate for licensure requirements in ECED and MCED. Offered alternate fall semesters. 10 hours field experience. Prerequisite(s): EDUC 3001. Course Attributes: Integration Across Disciplines, Requires CTE admission.

EDUC 3441 - Intervention Specialist Classroom Organization*2 Credits*

This course is designed to assist prospective intervention specialists in understanding teacher and student behaviors, discipline in the educational process and communication techniques as they apply to good classroom management. In addition, students will explore techniques for maximizing learning in a variety of classroom settings, building students' self-concepts and understanding the use and abuse of power. 45 field hours. Prerequisites: all major requirements as listed in the professional preparation outline for early childhood. Course is taken during the semester of Clinical Practice (EDUC 4631). Offered at Bluffton University. Prerequisite(s): EDUC 2211 and EDUC 2311 and EDUC 2351 and EDUC 3841 and EDUC 3891. Corequisite(s): EDUC 4631. Must be enrolled in one of the following Classifications: Junior, Senior.

EDUC 3451 - Literacy Across the Content Areas/AYA/MA*3 Credits*

Literacy connections across the curriculum including instruction methods in prereading, vocabulary, comprehension strategies, and study skills. Appropriate for licensure requirements in AYA and MA. Offered fall semester. 20 hours field experience. Course Attributes: Integration Across Disciplines, Requires CTE admission.

EDUC 3501 - Departmental Field Experience*0 Credits Grading mode is S/U*

Individually planned field experience based on an area of licensure purposes and objectives and/or student teaching objectives. Specific objectives and experience proposed by student and must be approved by major department and education advisors. Required for adolescent or multiage licensure if 160 hours of field experience is not complete in other professional education courses. Must be enrolled in one of the following Colleges: Arts and Sciences. Must be enrolled in one of the following Departments: Education. Course Attributes: Requires CTE admission.

EDUC 3841 - Methods and Materials for Diverse Learners*3 Credits*

Designed to develop teacher competency, to analyze learners and to plan the "least restrictive environment" for the student with mild to moderate educational needs. Candidates will develop skills in designing, implementing and evaluating appropriate educational interventions in the areas of language, math, reading, behavior and social skills. Attention will also be given to occupational orientation and transition planning. Candidates will develop knowledge and skills in designing lessons, classroom environments, community-based instruction and transition planning. Offered at Bluffton University. Prerequisite(s): EDUC 2101 and EDUC 1151 and PSYC 1001.

EDUC 3891 - Current Issues in Special Education*1 Credit*

This course is designed to present current issues affecting the education of exceptional children. Students will examine such topics as contemporary research findings, community and governmental resources, current federal and state regulations, special education service delivery models and counseling/supporting parents of exceptional children. Offered at Bluffton University. Prerequisite(s): EDUC 1151 and EDUC 1501.

EDUC 3901 - Special Topics in Education*1 to 3 Credits*

Selected special topics in education. Can be repeated as the topic varies. Unlimited repeats permitted.

EDUC 4001 - Assessment of Reading Instruction

3 Credits

Use of student assessment information to inform planning, teaching and learning for struggling readers and writers. Offered fall and spring semesters. 10 hours field experience. Prerequisite(s): EDUC 3121. Course Attributes: Requires CTE admission.

EDUC 4401 - Educational Psychology and Instructional Practices

3 Credits

Teaching behavior, instructional techniques and classroom management from a constructivist perspective essential for effective instruction in adolescent and multiage classrooms. Offered fall and spring semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4451 - Leadership Seminar in Education

2 Credits Grading mode is S/U

An emphasis on professional growth and development and an overview of legal and financial aspects of education, organizational structure at the local and state level, influence and requirements from the state and federal government, and information related to teaching position search. Offered fall and spring semesters. Course Attributes: Requires CTE admission.

EDUC 4511 - Integrated Science Methods

3 Credits

Constructivist approach to science education methods and materials in the AYA classroom. Focus on standards, inquiry, safety, assessment, and incorporation of technology with content of a general science curriculum. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4521 - Integrated Language Arts Methods

3 Credits

Effective methods in teaching language, writing, and literature. Preparation for Licensure exam. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4531 - Integrated Social Studies Methods

3 Credits

A theoretical basis for social studies education with a strong emphasis on the teaching methods and practices that enliven the social studies classroom for adolescent students. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4541 - Integrated Mathematics Methods

3 Credits

Methods and current issues in adolescent/young adult mathematics teaching including concept construction, differentiation, assessment, technology, and teaching strategies. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4561 - Integrated Modern Language Methods

3 Credits

Practical approaches to meeting standards for foreign language teaching. Strategies for developing communication skills, addressing diverse learner needs, and assessing outcomes. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4571 - Integrated Art Methods

3 Credits

Effective strategies and methods of instruction in teaching visual art. Lesson planning, resource materials, media, curriculum, issues, and assessment of a comprehensive program. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4581 - Organization and Methods of Technology Education

3 Credits

Philosophical constructs, organizing courses, program and course objectives, preparing lesson plans and industrial materials, laboratory procedures, administrative practices, and project management. Offered alternate spring semesters. 18 hours field experience, 6 hours clinical. Course Attributes: Requires CTE admission.

EDUC 4591 - Integrated Music Methods

3 Credits

Philosophy, techniques, materials, curriculum planning for the music teacher. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4601 - Integrated Health Methods

3 Credits

Innovative strategies for the teaching of health education are applied. Attention is given to conceptualizing instruction, specifying instructional objectives, planning units and lessons, utilizing various instructional methods, selecting and using instructional materials, and evaluating teaching effectiveness. Offered alternate spring semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

EDUC 4611 - Integrated Physical Education Methods

3 Credits

Methods and techniques most effective in teaching of the discipline in the public schools. Includes analysis of successful teaching behaviors during the planning and implementation of quality learning experiences. Offered alternate fall semesters. 20 hours field experience. Corequisite(s): PHED 3001. Course Attributes: Requires CTE admission.

EDUC 4631 - Clinical Practice - Intervention Specialist

10 Credits Grading mode is S/U

Clinical practice provides supervised experiences in applying the principles and techniques learned in the professional courses to classroom situations under the guidance and direction of a cooperating teacher. Clinical Practitioners spend full days in their assigned public school setting for 10 weeks during the senior year. Offered at Bluffton University. Prerequisite(s): EDUC 2211 and EDUC 2311 and EDUC 2351 and EDUC 3841 and EDUC 3891. Corequisite(s): EDUC 3441. Must be enrolled in one of the following Classifications: Senior.

EDUC 4701 - Student Teaching - EC/MC

12 Credits Grading mode is S/U

Capstone practicum of supervised teaching in the major licensure field of the candidate. Offered fall and spring semesters. Corequisite(s): EDUC 4451. Course Attributes: Critical and Creative Thinking, Effective Communication Non-Writing, Effective Communication Writing, Requires CTE admission.

EDUC 4721 - Student Teaching-Adolescent

12 Credits Grading mode is S/U

Capstone practicum of supervised teaching in the major licensure field of the candidate. Offered fall and spring semesters. Corequisite(s): EDUC 4451. Course Attributes: Critical and Creative Thinking, Effective Communication Non-Writing, Effective Communication Writing, Requires CTE admission.

EDUC 4741 - Student Teaching - MultiAge

12 Credits Grading mode is S/U

Capstone practicum of supervised student teaching in the major licensure field of the candidate. Offered fall and spring semesters. Corequisite(s): EDUC 4451. Course Attributes: Critical and Creative Thinking, Effective Communication Non-Writing, Effective Communication Writing, Requires CTE admission.

EDUC 4761 - Education Studies Capstone

3 Credits

Exploration of a topic in education with faculty supervision including preparation of a paper on the topic. Offered fall and spring semesters. This capstone does not lead to teacher licensure. Course Attributes: Requires CTE admission.

EDUC 4991 - Independent Study

1 to 3 Credits

The independent study designation to be used as a prefix for the specific course taken independently. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted.

Subject- Middle Childhood Education (MCED)

MCED 2601 - Introduction to Middle Childhood Education

3 Credits

The history, philosophy, and organization of middle school education. Planning, instructional strategies, and evaluation responsive to the needs of young adolescents. Utilization of multi-media materials, creative exploration, and enrichment activities to build an effective middle school curriculum. 2.50 GPA and Praxis I or equivalent required. Offered alternate fall semesters. 10 hours field experience. Prerequisite(s): EDUC 1151.

MCED 2671 - Educational Psychology and Middle Childhood Assessment

3 Credits

Connecting learning with formal and informal assessments and from a cognitive, linguistic, and social development perspective in a middle childhood classroom. Offered alternate spring semesters. 10 hours field experience. Prerequisite(s): EDUC 1151.

MCED 2991 - Independent Study

1 to 3 Credits

The independent study designation to be used as a prefix for the specific course taken independently. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted.

MCED 3051 - Young Adult Literature for the Middle Childhood Classroom

3 Credits

Literature for individual, group, and whole-class reading in middle childhood education (grades 4-9). Offered alternate spring semesters.

MCED 3081 - Middle School Mathematics Methods

3 Credits

Methods and current issues in middle school mathematics teaching, including content, strategies, materials, technology and assessment. Offered alternate fall semester. 20 hours field experience. Course Attributes: Requires CTE admission.

MCED 3091 - Middle School Science Methods

3 Credits

Constructivist approach to science education methods and materials in the middle school classroom. Focus on standards, inquiry, safety, assessment, and incorporation of technology with content of a general science curriculum. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

MCED 3111 - Middle School Social Studies Methods

3 Credits

A theoretical basis for social studies education with a strong emphasis on the teaching methods and practices that enliven the social studies classroom for middle childhood students. The student will also be prepared to effectively teach Ohio history, including coverage of the necessary content. Offered alternate fall semesters. 20 hours field experience. Course Attributes: Requires CTE admission.

MCED 3901 - Special Topics in Middle Childhood Education

1 to 3 Credits

Selected special topics in middle childhood education. Can be repeated as the topic varies. Unlimited repeats permitted.

MCED 4991 - Independent Study

1 to 3 Credits

The independent study designation to be used as a prefix for the specific course taken independently. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted.

DEPARTMENT OF ENGLISH

Professors Robeson (*Chair*), McManus, R. Scott; **Associate Professors** Bauer, Cullen, Kanwit, J. Pitts; **Assistant Professors** Dowland, Moore, Neiderhiser

Mission Statement

Based on its commitment to the values of the humanities, the faculty of the Department of English teaches analytical reading and critical, creative, and professional writing as forms of art, as sources of pleasure, as a means of understanding diverse peoples and cultures, and as practical, marketable skills. Through close interaction with written, oral, and digital texts, students develop as critical thinkers and writers to become producers of knowledge. Through close interaction with peers and faculty, and active engagement with a variety of publications and professional experiences, students learn the value of creating texts and, in turn, become thoughtful members of our global community. Studies in English prepare students for professional, business and teaching careers, for law school, for graduate study in English and other disciplines, as well as for a lifetime of continual engagement with language and literature.

Vision or Overview Statement

The English Department at Ohio Northern University will continue to strengthen our unique and individualized programs in Creative Writing, Language Arts Education, Literature, and Professional Writing, while also encouraging a sense of community and common purpose among our students and faculty. We will continue to create innovative programs and classes that foster critical and creative thinking, reading, and writing. We will cultivate an understanding of diverse cultures and an appreciation for aesthetics. We will take a leadership role in developing writing skills for students across the university.

Accreditation and Professional Memberships

The Integrated Language Arts (grades 7-12) licensure program (Language Arts Education major) is approved by the state of Ohio. Ohio Northern University's Teacher Education Program is accredited by the National Council for Accreditation of Teacher Education (NCATE). Additionally, the department holds membership in the National Council of Teachers of English (NCTE), Modern Language Association (MLA), Ohio Council of Teachers of English Language Arts (OCTELA), College English Association of Ohio (CEAO), College English Association (CEA), and Sigma Tau Delta, the international English honor society.

Majors, Minors and Degrees Offered

Creative Writing Major (BA)
Language Arts Education Major (BA)
Literature Major (BA)
Law 3+3 in Literature (BA)
Professional Writing Major (BA)
Creative Writing Minor
Literature Minor
Medical Humanities Minor
Professional Writing Minor

Medical Humanities Minor (19 credit hours)

Required core courses:

AASG 2XXX Perspectives in Medical Humanities (3 credits)
ENGL 3271 Literature and Medicine (3 credits)
AASG 4XXX Integrative Portfolio in Medical Humanities (1 credit)

One of the following:

PHIL 1051 Ethics, Law and Justice (3 credits)
PHIL 2401 Professional Ethics (3 credits)
PHIL 3201 Political Philosophy (3 credits)
PHIL 3441 Ethical Theory (3 credits)

Elective courses (select 3):

CAMS 2331 Health Communication (3 credits)
PSYC 2201 Health Psychology (3 credits)
PSYC 3901 Special Topics in Psychology (3 credits)
RELG 1071 Religions East and West (3 credits)
SOC 3481 Sociology of Health and Health Care (3 credits)

- SOC 3491 Sociology of Mental Health and Illness (3 credits)
 SOC 3901 Special Topics in Sociology (3 credits)

Licensure Offered

Adolescent Young Adult (7-12) Language Arts Licensure for students majoring in Language Arts Education.

Admission Requirements

Only one major in the department, Language Arts Education for Integrated Language Arts Secondary Teaching Licensure, requires additional admission requirements beyond the standard criteria for acceptance to Ohio Northern University. Students must request acceptance into the Center for Teacher Education (CTE) once they have successfully completed Praxis Core for Educators exams or equivalent, have a 2.5 overall GPA, and have met specific CTE course and field experience requirements.

Special Programs

Pre-Law Program

The English Department participates in the 3+3 Law Admissions Program, so that students majoring in Literature may participate in the program. For more information, see the fuller description on page 22.

Internships and Study Abroad

The English Department requires internships for the Professional Writing major, but internship opportunities that provide hands-on professional experience are available to students in all department majors. Faculty advisers recommend that English majors take advantage of study abroad options and Washington Center internships where possible.

Publications

The Department produces two publications: *Polaris* (creative writing magazine) and *Department Newsletter* (alumni newsletter).

Students in all major concentrations are required to have experience working on department publications and are encouraged to work on more than one to gain diverse publication experience and create an expanded portfolio.

Conferences

Students submit top papers and projects from their classes to the Sigma Tau Delta national conference and to other student and professional conferences. Faculty members take student editors and other groups to state and national conferences. Language Arts Education majors are required to attend two professional conferences for graduation. Travel to these conferences is supported by department funding.

Major Course Requirements

Neither 1000-level English courses (excluding 1001) nor ENGL 2041 count toward any major, minor, or option in the department, nor does any major course with a grade below "C."

All majors include a senior capstone project for which students prepare a professional project or paper with a view to publication under the guidance of an instructor in a 3000- or 4000-level course. In ENGL 4461, they revise and formally present their projects to department faculty, students and families in a professional conference setting in the department.

The student may complete two majors or a major and a minor within the department so long as there is no more than 30% duplication of courses within the second major or minor. In addition, the department encourages complementary majors, minors, or options in other disciplines.

Creative Writing Major (37 credit hours)

- ENGL 0011 Enrichment (0)
- ENGL 2011 Introduction to Creative Writing (3)
- ENGL 2101 Pro Seminar: English Studies (3)
- ENGL 2111 American Literature 1 (3)
- or
- ENGL 2121 American Literature 2 (3)
- ENGL 2131 British Literature 1 (3)
- or
- ENGL 2141 British Literature 2 (3)
- ENGL 4461 Capstone (1)

Select three additional literature courses (at least two courses must be at the 3000 and 4000 level)

Select 12 credits (at least one course must be at the 4000 level):

- ENGL 3401 Intermediate Poetry Writing (3)
- ENGL 3411 Intermediate Fiction Writing (3)
- ENGL 3421 Screenwriting (3)
- ENGL 4401 Advanced Poetry Writing (3)
- ENGL 4411 Advanced Fiction Writing (3)
- ENGL 4421 Nonfiction Writing (3)
- TATH 3821 Playwriting (3)

Select 3 credits:

- CAMS 2161 Multimedia Journalism Practicum
- ENGL 2511* Magazine Practicum (1-3)
- ENGL 2521* Journal Publishing Practicum (1-3)
- ENGL 2531* Web Publishing Practicum (1-3)
- ENGL 2541* Screenwriting Workshop (1-3)
- ENGL 2551* Creative Writing Workshop (1-3)
- ENGL 3431* Department Newsletter (3)

*Workshops and practica have variable credit of 1-3 hours (they may be taken for more than 1 credit at the instructor's discretion) and may be repeated; English Department Newsletter is taken for 3 credit hours. Only 6 hours of practicum, workshop and newsletter credits will count toward graduation.

Language Arts Education Major (90 credit hours)

Successful completion of this major meets the curriculum and experience requirements for the Adolescent Young Adult (7-12) Teaching Licensure.

- ENGL 0011 Enrichment (0)
- ENGL 1001 Introduction to Literature (3)
- ENGL 2101 Pro Seminar: English Studies (3)
- ENGL 2001 Grammar in Context (3)
- ENGL 2251 Children's and Young Adult Literature (3)
- ENGL 3511 English Language (3)
- ENGL 4121 Shakespeare Studies (3)
- ENGL 4461 Capstone (1)

Select one:

- CAMS 2101 News Writing (3)
- ENGL 2011 Introduction to Creative Writing (3)

Select one:

- ENGL 2071 Topics in Fiction (3)
- ENGL 2081 Topics in Drama (3)
- ENGL 2091 Topics in Poetry (3)

Select three:

- ENGL 2111 American Literature 1 (3)
- ENGL 2121 American Literature 2 (3)
- ENGL 2131 British Literature 1 (3)
- ENGL 2141 British Literature 2 (3)

Select one:

- ENGL 2511 Magazine Practicum (1-3)
- ENGL 2521 Journal Publish Practicum (1-3)
- ENGL 2571 Research Practicum (1-3)
- CAMS 2161 Multimedia Journalism Practice (1-3)
- ENGL 2541 Screenwriting Workshop (1-3)
- ENGL 2551 Creative Writing Workshop (1-3)
- ENGL 3431 English Department Newsletter (1-3)

Select one:

- ENGL 2191 Topics in World Literature (3)
- ENGL 2631 Women's Literature (3)
- ENGL 2741 American Multicultural Literature (3)
- ENGL 3201 European Literature (3)
- ENGL 3301 Postcolonial Literature (3)
- ENGL 4321 Studies in Comparative Literature (3)

Select two:
 ENGL 3101 Topics in Medieval Literature (3)
 ENGL 3191 Renaissance and Jacobean Literature (3)
 ENGL 3261 Post-World War I British Literature (3)
 ENGL 3341 Topics in American Literature pre-1865 (3)
 ENGL 3351 Topics in American Literature post-1865 (3)
 ENGL 3641 British Novel (3)
 ENGL 3651 American Novel (3)
 ENGL 3811 Modernist and Contemporary Poetry (3)
 ENGL 3901 Special Topics in English (3)
 ENGL 4051 Studies in Literary and Cultural Theory (3)
 ENGL 4101 Chaucer (3)
 ENGL 4231 18th Century/British Romanticism (3)
 ENGL 4241 Victorian Period (3)
 ENGL 4311 Studies in American Literature (3)
 ENGL 4901 Special Topics in English (3)

AYA Licensure (Center for Teacher Education Requirements)

ENGL 1221 Writing Seminar (3)
 CAMS 1311 Communication in the Classroom (3)
 EDUC 1151 Culture and Schooling (3) (20 hours field)
 EDUC 2101 Exceptional Learners (3) (20 hours field)
 PSYC 2171 Adolescent Psychology (3)
 EDUC 2681 Curriculum and Assessment (3) (20 hours field)
 EDUC 3201 Instructional Media and Educational Technologies (3)
 EDUC 3451 Literacy Across the Content Areas AYA/MA (3) (20 hours field)
 EDUC 4401 Educational Psychology and Instructional Practices (3) (20 hours field)
 EDUC 4451 Leadership Seminar in Education (2)
 EDUC 4521 Integrated Language Arts Methods (3) (20 hours field)
 EDUC 4721 Student Teaching/AYA (12)

In addition to the requirements above, all language arts education majors must attend two professional conferences and complete a Language Art Education portfolio. The appropriate subject exam must be passed prior to application for the AYA license.

Literature Major (38 credit hours)

ENGL 0011 Enrichment (0)
 ENGL 1001 Introduction to Literature (3)
 ENGL 2101 Pro Seminar: English Studies (3)
 ENGL 3511 English Language (3)
 ENGL 4121 Shakespeare Studies (3)
 ENGL 4461 Capstone (1)

Select one:

ENGL 2511 Magazine Practicum (1-3)
 ENGL 2521 Journal Publishing Practicum (1-3)
 ENGL 2531 Web Publishing Practicum (1-3)
 ENGL 2571 Research Practicum (1-3)

Select three:

ENGL 2111 American Literature 1 (3)
 ENGL 2121 American Literature 2 (3)
 ENGL 2131 British Literature 1 (3)
 ENGL 2141 British Literature 2 (3)

Select one:

ENGL 2071 Topics in Fiction (3)
 ENGL 2081 Topics in Drama (3)
 ENGL 2091 Topics in Poetry (3)

Select one:

ENGL 2191 Topics in World Literature (3)
 ENGL 2251 Children's and Young Adult Literature (3)
 ENGL 2631 Women's Literature (3)
 ENGL 2741 American Multicultural Literature (3)
 ENGL 3201 European Literature (3)
 ENGL 3301 Postcolonial Literature (3)
 ENGL 4321 Studies in Comparative Literature (3)

Select two:

ENGL 3101 Topics in Medieval Literature (3)
 ENGL 3191 Renaissance and Jacobean Literature (3)
 ENGL 3261 Post-World War I British Literature (3)
 ENGL 3341 American Literature pre-1865 (3)
 ENGL 3351 American Literature post-1865 (3)
 ENGL 3641 British Novel (3)
 ENGL 3651 American Novel (3)
 ENGL 3811 Modernist and Contemporary Poetry (3)
 ENGL 3901* Special Topics in English (3)
 ENGL 4051 Studies in Literary and Cultural Theory (3)
 ENGL 4101 Chaucer (3)
 ENGL 4231 18th Century/British Romanticism (3)
 ENGL 4241 Victorian Period (3)
 ENGL 4311 Studies in American Literature (3)
 ENGL 4901* Special Topics in English (3)
 ENGL 4971 Independent Study in Literature (1-3)

Any additional 3-hour ENGL course excluding ENGL 1221

*ENGL 3901 and 4901 Special Topics and ENGL 4971 may fill genres, cultures or historical requirements depending on topic. They may be repeated if the topic varies.

Literature and Law 3+3 Program (37 credit hours)

ENGL 0011 Enrichment (0)
 ENGL 1001 Introduction to Literature (3)
 ENGL 2101 Proseminar: English Studies (3)
 ENGL 2601 Introduction to Shakespeare or ENGL 4121 Shakespeare Studies (3)
 ENGL 2001 Grammar in Context or ENGL 3511 English Language (3)
 ENGL 4461 Capstone (1)

Choose 1:

ENGL 2071 Topics in Fiction (3)
 ENGL 2081 Topics in Drama (3)
 ENGL 2091 Topics in Poetry (3)
 ENGL 2111 American Literature 1 (3)
 ENGL 2121 American Literature 2 (3)
 ENGL 2131 British Literature 1 (3)
 ENGL 2141 British Literature 2 (3)
 ENGL 2151 Literature and the Environment (3)
 ENGL 2191 Topics in World Literature (3)
 ENGL 2601 Introduction to Shakespeare
 ENGL 2631 Women's Literature (3)
 ENGL 2741 American Multicultural Literature (3)
 ENGL 2901 Special topics (3)

Choose 3:

ENGL 3191 Renaissance and Jacobean Literature (3)
 ENGL 3201 European Literature (3)
 ENGL 3261 Post-World War I British Literature (3)
 ENGL 3271 Literature and Medicine
 ENGL 3301 Postcolonial Literature (3)
 ENGL 3341 American Literature pre-1865 (3)
 ENGL 3351 American Literature post-1865 (3)
 ENGL 3641 British Novel (3)
 ENGL 3651 American Novel (3)
 ENGL 3811 Modernist and Contemporary Poetry (3)
 ENGL 3901 Special Topics

Choose 3:

ENGL 4051 Studies in Literary and Cultural Theory (3)
 ENGL 4101 Chaucer (3)
 ENGL 4111 Topics in Medieval Literature (3)
 ENGL 4121 Shakespeare Studies (3)
 ENGL 4231 18th Century British Romanticism (3)
 ENGL 4241 Victorian Studies (3)
 ENGL 4311 Studies in American Literature (3)
 ENGL 4321 Studies in Comparative Literature (3)
 ENGL 4901 Special Topics (3)

Choose 1:
ENGL 2511 Magazine Publishing (1-3)
ENGL 2531 Web Publishing Practicum (1-3)
ENGL 2541 Screenwriting Practicum (1-3)

Elective: Any 3-credit course with an ENGL prefix excluding ENGL 1221

Professional Writing Major (37 credit hours)

ENGL 0011 Enrichment (0)
ENGL 2001 Grammar in Context (3)
ENGL 2051 Writing in the Professions (3)
ENGL 2101 English Studies (3)
ENGL 3431 Department Newsletter (3)
ENGL 3791 Advanced Professional Writing (3)
ENGL 4051 Studies in Literature and Cultural Theory (3)
ENGL 4421 Writing in Digital Environments (3)
ENGL 4521 Rhetorical Theory (3)
ENGL 4461 Capstone (1)
ENGL 4821 Internship (PW) (3)

Select 3 hours:

ENGL 2531 Web Publishing Practicum (1-3)
ENGL 2511 Magazine Practicum (1-3)
CAMS 2161 Multimedia Journalism Practicum (1-3)

Select 3 courses from any area or combination of areas:

Technical Writing

ENGL 2031 Technical/Science Writing (3)
ENGL 2061 Grant Writing (3)

Business and Entrepreneurship

CAMS 1201 Introduction to Public Relations (3)
ENGL 2021 Business Writing (3)
CAMS 2201 Public Relations Writing (3)
ABUS 2221 Principles of Entrepreneurship (3)
BIZ 2511 Marketing for Business Planning (3)

Multimedia Journalism

CAMS 2101 News Writing (3)
CAMS 2111 Layout and Design (3)
CAMS 3101 Feature Writing (3)
CAMS 3111 Editing (3)
CAMS 3131 Photojournalism (3)
CAMS 3141 Video Storytelling (3)

Design (Web and/or Graphic)

DSGN 1101 Photography and Communication (3)
DSGN 1301 Typography (3)
TECH 1421 Web Development and Multimedia (3)
DSGN 2401 Narrative Structures (3)
DSGN 2651 History of Graphic Design (3)
DSGN 3501 Persuasive Design (3)

Other

ENGL 2901 Special Topics (in Writing) (3)
ENGL 3421 Screenwriting (3)
ENGL 3781 Journal Publishing (3)
ENGL 3901 Special Topics (in Writing) (3)
ENGL 4421 NonFiction Writing (3)
ENGL 4901 Special Topics (in Writing) (3)
Any 3000- or 4000-level course in literature (3)

Minor Course Requirements

The student completing an English major may also complete a minor within the department so long as there is no more than 30% duplication of major courses within the minor. All courses required for the minor must be completed with a grade of "C" or higher.

Creative Writing Minor (22 credit hours)

ENGL 2101 Pro Seminar: English Studies (3)
ENGL 2011 Introduction to Creative Writing (3)
Select two additional ENGL literature courses (6)

Select three:

ENGL 3401 Intermediate Poetry Writing (3)
ENGL 3411 Intermediate Fiction Writing (3)
ENGL 3421 Screenwriting (3)
ENGL 4401 Advanced Poetry Writing (3)
ENGL 4411 Advanced Fiction Writing (3)
ENGL 4421 Nonfiction Writing (3)
TATH 3821 Playwriting (3)

Select 1 credit:

ENGL 2511* Magazine Practicum (1-3)
ENGL 2521* Journal Publishing Practicum (1-3)
ENGL 2531* Web Publishing Practicum (1-3)
ENGL 2541* Screenwriting Workshop (1-3)
ENGL 2551* Creative Writing Workshop (1-3)
ENGL 2561** English Department Newsletter** (3)

*Courses marked with a single asterisk have variable credit of 1-3 hours (at the instructor's discretion) and may be repeated, but only 6 credits may count for graduation.

** The course marked with a double asterisk has fixed credit of 3 hours, but only 1 credit counts for the minor.

Literature Minor (18 credit hours)

ENGL 2101 Pro Seminar: English Studies (3)

Distribution Requirements (Choose 1)

ENGL 2111 American Literature 1 (3)
ENGL 2121 American Literature 2 (3)
ENGL 2741 American Multicultural Literature (3)
ENGL 2811 Modern and Contemporary Poetry (3)
ENGL 3341 American Literature pre-1865 (3)
ENGL 3351 American Literature post-1865 (3)
ENGL 3651 American Novel (3)
ENGL 4311 Studies in American Literature (3)

British Literature (Choose 1)

ENGL 2131 British Literature 1 (3)
ENGL 2141 British Literature 2 (3)
ENGL 2601 Introduction to Shakespeare (3)
ENGL 3261 Post-World War I British Literature (3)
ENGL 3641 British Novel (3)
ENGL 4111 Topics in Medieval Literature (3)
ENGL 4121 Shakespeare Studies (3)
ENGL 4231 18th Century/British Romanticism (3)
ENGL 4241 Victorian Period (3)

World Literature (Choose 1)

ENGL 2191 Topics in World Literature (3)
ENGL 3201 European Literature (3)
ENGL 3301 Postcolonial Literature (3)
ENGL 4321 Studies in Comparative Literature (3)

Electives (Choose 2)

ENGL 2071 Topics In Fiction (3)
ENGL 2081 Topics in Drama (3)
ENGL 2091 Topics In Poetry (3)
ENGL 2191 Topics in World Literature (3)
ENGL 2631 Women's Literature (3)
ENGL 3511 English Language (3)
ENGL 3901 Special Topics In Literature (3)
ENGL 4051 Special Topics in Literature (3)
ENGL 4051 Studies In Literary and Cultural Theory (3)
ENGL 4901 Special Topics in Literature (3)
ENGL 4971 Independent Study in Literature (3)

Medical Humanities Minor (19 credit hours)

- AASG 2011 Perspectives in Medical Humanities (3)
 ENGL 3271 Literature and Medicine (3)
 AASG 4011 Integrative Portfolio in Medical Humanities (1)

Select One:

- PHIL 1051 Ethics, Law and Justice (3)
 PHIL 2401 Professional Ethics (3)
 PHIL 3201 Political Philosophy (3)
 PHIL 3441 Ethical Theory (3)

Select Three:

- CAMS 2331 Health Communication (3)
 PSYC 2201 Health Psychology (3)
 PSYC 3901 Special Topics in Psychology (3)
 RELG 1071 Religions East and West (3)
 SOC 3481 Sociology of Health and Health Care (3)
 SOC 3491 Sociology of Mental Health and Illness (3)
 SOC 3901 Special Topics in Sociology (3)

For credit towards the minor, Special Topics courses will require approval from the committee.

Professional Writing Minor (18 credit hours)

- ENGL 2051 Writing in the Professions (3)
 ENGL 3791 Advanced Professional Writing (3)

Select one:

- ENGL 4051 Cultural Theory (3)
 ENGL 4521 Rhetorical Theory (3)
 ENGL 4421 Writing in Digital Environments (3)

Select two hours:

- CAMS 2161 Multimedia Journalism Practicum (1-3)
 ENGL 2511 Magazine Practicum (1-3)
 ENGL 2531 Web Publishing Practicum (1-3)

Select three in any area or combination of areas:

- ENGL 2031 Technical/Science Writing (3)
 ENGL 2061 Grant Writing (3)

Business and Entrepreneurship

- CAMS 1201 Introduction to Public Relations (3)
 ENGL 2021 Business Writing (3)
 CAMS 2201 Public Relations Writing (3)
 ABUS 2221 Principles of Entrepreneurship (3)
 BIZ 2511 Marketing for Business Planning (3)

Multimedia Journalism

- CAMS 2101 News Writing (3)
 CAMS 2111 Layout and Design (3)
 CAMS 3101 Feature Writing (3)
 CAMS 3111 Editing (3)
 CAMS 3131 Photojournalism (3)
 CAMS 3141 Video Storytelling (3)

Design (Web and/or Graphic)

- DSGN 1101 Photography and Communication (3)
 DSGN 1301 Typography (3)
 TECH 1421 Web Development and Multimedia (3)
 DSGN 2401 Narrative Structures (3)
 DSGN 2651 History of Graphic Design (3)
 DSGN 3501 Persuasive Design (3)

Other

- ENGL 2901 Special Topics (in Writing) (3)
 ENGL 3421 Screenwriting (3)
 ENGL 3781 Journal Publishing (3)
 ENGL 3901 Special Topics (in Writing) (3)
 ENGL 4421 NonFiction Writing (3)
 ENGL 4901 Special Topics (in Writing) (3)
 Any 3000- or 4000-level course in literature (3)

*Courses marked with a single asterisk have variable credit of 1 to 3 credit hours (with instructor permission). The course must be taken for a minimum of 1 credit hour each for three semesters. Only the hours required for the major will count toward graduation.

**Courses marked with a double asterisk may be taken when subject area is writing, with instructor permission.

Subject - English (ENGL)**ENGL 0011 - Enrichment**

0 Credits Grading mode is S/U

Enrichment of the curriculum for English department majors through required attendance at designated cultural and academic extracurricular events. Must be completed twice each academic year by all English department majors. Offered fall and spring semesters. Must be enrolled in one of the following Departments: English. This course may be repeated 8 times.

ENGL 1001 - Introduction to Literature

3 Credits

Approaches to analyzing, interpreting, and writing about literature. Offered fall and spring semesters. Must be enrolled in one of the following Classifications: Freshman, Sophomore, Junior, Senior. Course Attributes: Humanities, Effective Communication Writing, Informed Responses-Aesthetics.

ENGL 1221 - Writing Seminar

3 Credits

Introduction to college-level writing skills, including critical reading, the formulation of arguments, researching and incorporating outside sources, and writing essays. Required of all students. Meets university first-year writing requirement. Offered fall and spring semesters. Course Attributes: Effective Communication Writing.

ENGL 1411 - Intensive College Composition 1

3 Credits

Academic English skills for students whose native language is not English, with a focus on grammar and sentence-level structures leading to fully-developed paragraphs and short essays. This intensive course meets five hours per week. Enrollment determined by ONU Writing Placement Exam administered during International Student Orientation. ENGL 1411 and ENGL 1421 together satisfy the general education first-year writing requirement. Students must earn a C or better to advance to ENGL 1421. Offered fall semester.

ENGL 1421 - Intensive College Composition 2

3 Credits

Continuation of ENGL 1411 with additional emphasis on academic writing including documentation of sources and research writing. This intensive course meets five hours per week. ENGL 1411 and ENGL 1421 together satisfy the general education first-year writing requirement. Students must earn a C or better in ENGL 1411 to enroll in this course. Offered spring semester. Prerequisite(s): ENGL 1411 Minimum Grade of C. Course Attributes: Effective Communication Writing.

ENGL 1511 - College Composition 1

3 Credits

Academic English skills for students whose native language is not English, with emphasis on reading and writing. Enrollment determined by ONU Writing Placement Exam administered during International Student Orientation. ENGL 1511 and ENGL 1521 together satisfy the general education first-year writing requirement. Students must earn a C or better to advance to ENGL 1521. A score of 3.5 or higher on the ONU Writing Placement Exam is required to enroll in this course. Offered fall semester.

ENGL 1521 - College Composition 2

3 Credits

Continuation of ENGL 1511 with additional emphasis on academic writing including documentation of sources and research writing. ENGL 1511 and ENGL 1521 together satisfy the general education first-year writing requirement. Students must earn a C or better to satisfy the general education first-year writing requirement. Students must earn a C or better in ENGL 1511 to enroll in this course. Offered spring semester. Prerequisite(s): ENGL 1511 Minimum Grade of C. Course Attributes: Effective Communication Writing.

ENGL 2001 - Grammar in Context

3 Credits

English grammatical structures and their rhetorical effects.

ENGL 2011 - Introduction to Creative Writing

3 Credits

Introduction to creative writing techniques and texts in multiple genres. Course Attributes: Critical and Creative Thinking, Informed Responses-Aesthetics.

ENGL 2021 - Business Writing

3 Credits

Approaches to business communication focused on evaluating audience, purpose, and genre. Practical experience in drafting, revising and presenting formal documents including memos, proposals and presentations. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C. Course Attributes: Critical and Creative Thinking, Effective Communication Non-Writing.

ENGL 2031 - Technical and Science Writing

3 Credits

Approaches to technical communication focused on evaluating audience, purpose and genre in the production and use of documents in professional contexts and in the Natural Sciences. May include production of abstracts, proposals, usability studies, grant applications, lab reports and scholarly articles. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C. Course Attributes: Effective Communication Writing.

ENGL 2041 - Great Works

3 Credits

Major literary texts covering a range of historical periods and genres. A general education course with an emphasis on writing. Offered fall and spring semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1231 Minimum Grade of C or HONR 1221 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Humanities, Effective Communication Writing, Informed Responses-Aesthetics.

ENGL 2051 - Introduction to Professional Writing

3 Credits

The functions, uses, history, and practice of writing in professional situations, with a focus on practical understanding of fundamental rhetorical concepts. Assignments include print and online writing, research, and documentation projects in various professional situations with emphasis on grammatical correctness, concision and clarity, and the revision process. Offered alternate fall semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Effective Communication Writing, Integration Across Disciplines.

ENGL 2061 - Grant Writing

3 Credits

Introduction to drafting and submitting grants for funding agencies in academic and professional contexts. Practical experience in locating sources for funding, establishing goals, creating budgets and designing assessment. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C.

ENGL 2071 - Topics in Fiction

3 Credits

Exploration of thematic and stylistic elements in fiction from a variety of cultures and periods. This course may be repeated 2 times. This course is repeatable for a total of 6 hours. Course Attributes: Humanities, Effective Communication Writing, Informed Responses-Aesthetics.

ENGL 2081 - Topics in Drama

3 Credits

Exploration of thematic and stylistic elements in dramatic literature from a variety of cultures and periods. This course may be repeated 2 times. This course is repeatable for a total of 6 hours. Course Attributes: Humanities, Effective Communication Writing, Informed Responses-Aesthetics.

ENGL 2091 - Topics in Poetry

3 Credits

Exploration of thematic and stylistic elements in poetry from a variety of cultures and periods. This course may be repeated 2 times. This course is repeatable for a total of 6 hours. Course Attributes: Humanities, Critical and Creative Thinking, Informed Responses-Aesthetics.

ENGL 2101 - Proseminar: English Studies

3 Credits

Overview of theoretical and practical approaches to interpreting and writing about texts. Offered fall semester. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Must be enrolled in one of the following Departments: English.

ENGL 2111 - American Literature 1

3 Credits

The early period of American literature (1492-1870s), including such genres as exploration and spiritual narratives, revolutionary political writing, fiction, and poetry, taking into account social and historical context. Offered alternate fall semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1231 Minimum Grade of C or HONR 1221 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Humanities, Critical and Creative Thinking, Effective Communication Writing.

ENGL 2121 - American Literature 2

3 Credits

The early modern, modern, and contemporary periods of American literature (1870s to the present), including such movements as regionalism, realism, naturalism, modernism, and postmodernism in a variety of genres - mainly poetry, fiction, and drama - in a rapidly changing social milieu. Offered alternate spring semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1231 Minimum Grade of C or HONR 1221 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Humanities, Effective Communication Writing, Informed Responses-Aesthetics.

ENGL 2131 - British Literature 1

3 Credits

A survey of British literature from the Anglo-Saxon period through Neoclassicism in the eighteenth century, focusing on major and minor authors as reflective of both continuity and radical change in literary forms and cultural contexts. Offered alternate fall semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

ENGL 2141 - British Literature 2

3 Credits

A survey of British literature from late eighteenth-century Romanticism to the end of the twentieth century, with continuing emphasis on literary themes and forms within changing cultural contexts. Offered alternate spring semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

ENGL 2151 - Literature and the Environment

3 Credits

The study of classic and contemporary literature about the natural world. Literature as an exploration of the cultural construction of the environment. Literature as a response to environmental issues. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Humanities, Effective Communication Writing, Informed Responses-Aesthetics.

ENGL 2191 - Topics in World Literature

3 Credits

Approaches to reading world literatures in a variety of cultural and literary contexts. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

ENGL 2251 - Children's and Young Adult Literature

3 Credits

Literature specifically suited for children and adolescents. The readings selected from various genres will be studied using the same critical approaches that are traditionally used to analyze literature for adults. Offered fall semester. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

ENGL 2511 - Magazine Publishing Practicum

1 to 3 Credits Grading mode is S/U

One to six credits, depending on role, to be determined by the department. Offered fall and spring semesters. This course may be repeated 8 times. This course is repeatable for a total of 6 hours.

ENGL 2521 - Journal Publishing Practicum

1 to 3 Credits

Workshop experience for English majors in technical and management skills related to the publication of professional journals. One to three credits, depending on role, to be determined by department. Course may be repeated, but only six hours will count toward graduation. Offered fall and spring semesters. This course may be repeated 8 times. This course is repeatable for a total of 6 hours.

ENGL 2531 - Web Publishing Practicum

1 to 6 Credits Grading mode is S/U

Publication activities on the ONU electronic magazine (R)emedia. One to six credits, depending on role, to be determined by department. This course may be repeated 8 times. This course is repeatable for a total of 6 hours.

ENGL 2541 - Screenwriting Workshop

1 to 3 Credits

Weekly workshop for the exploration of all aspects of screenwriting. Suitable for all levels of experience. Variable credit of one to three hours (at the instructor's discretion). Offered fall and spring semesters. This course may be repeated 8 times. This course is repeatable for a total of 6 hours.

ENGL 2551 - Creative Writing Workshop

1 to 3 Credits Grading mode is S/U

Weekly workshop. An introduction to multiple creative writing genres and techniques with an emphasis on practice through prompts and other activities. Suitable for all levels of experience. Variable credit of one to three hours (at the instructor's discretion). Offered fall and spring semesters. This course may be repeated 8 times. This course is repeatable for a total of 6 hours.

ENGL 2571 - Research Practicum

1 to 3 Credits

Practical experience in using such research skills as documentation, editing, and preparing manuscripts. Student will work with faculty member as research assistant. One to three credits, depending on role, to be determined by department. Offered fall and spring semesters. This course is repeatable for a total of 6 hours.

ENGL 2601 - Introduction to Shakespeare

3 Credits

Representative plays and poetry from the entire span of Shakespeare's career and from each of the genres. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Humanities, Informed Responses-Aesthetics, Integration Across Disciplines.

ENGL 2631 - Women's Literature

3 Credits

Selected works by or about women in English or in translation, drawn from a variety of genres in all historical eras, viewed from various critical perspectives, including feminist and historical/cultural theories. Course Attributes: Humanities, Critical and Creative Thinking, Diversity-Human Interaction.

ENGL 2741 - American Multicultural Literature

3 Credits

American multicultural literature with emphasis on aesthetic value and cultural context. Offered alternate fall semesters. Course Attributes: Humanities, Diversity-Human Interaction, Effective Communication Writing.

ENGL 2901 - Special Topics

3 Credits

May be repeated as the topic varies. This course is repeatable for a total of 9 hours.

ENGL 3191 - Renaissance and Jacobean Literature

3 Credits

Major writers, themes, movements, or genres from 1485 to 1660, including such authors as Marlowe, Jonson, Spenser, Donne, and Milton. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Humanities.

ENGL 3201 - European Literature

3 Credits

The Western tradition in literature, including representative continental literature in translation from the Classical Greek era to the present. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Humanities.

ENGL 3261 - Post-World War I British Literature

3 Credits

British literature from the 1900s to the present, with concentration on a few selected writers. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Humanities.

ENGL 3271 - Literature and Medicine

3 Credits

Exploration of interdisciplinary of literature and medicine. Literary representations of health and illness, the practitioner-patient relationship, and the social role of medicine. Prerequisite(s): ENGL 1221 or HONR 1221 or ENGL 1421 or ENGL 1521. May not be enrolled in one of the following Classifications: Freshman. Course Attributes: Humanities.

ENGL 3301 - Postcolonial Literature

3 Credits

Major works in world literatures written in English from such regions as India, Anglophone Africa, Australia, and the Caribbean, with attention to cultural context. This course satisfies the Arts and Sciences non-Western requirement. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Non Western Cultural, Humanities.

ENGL 3341 - American Literature pre-1865

3 Credits

American literature from 1492 to the 1870s, with concentration on a few selected writers or themes in the context of literary and social influences. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Humanities, Critical and Creative Thinking, Informed Responses-Aesthetics, Integration Across Disciplines.

ENGL 3351 - American Literature post-1865

3 Credits

American literature from the 1870s to the present, with a concentration on a few selected writers or themes in the context of literary and social influences. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Humanities.

ENGL 3401 - Intermediate Poetry Writing*3 Credits*

The discipline and techniques of poetry writing and analysis. Workshop and discussion setting. Offered alternate fall semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C or ENGL 2011 Minimum Grade of C. May not be enrolled in one of the following Classifications: Freshman. Course Attributes: Effective Communication Writing.

ENGL 3411 - Intermediate Fiction Writing*3 Credits*

The discipline and technique of fiction writing and analysis. Workshop and discussion setting. Offered alternate fall semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C or ENGL 2011 Minimum Grade of C. May not be enrolled in one of the following Classifications: Freshman.

ENGL 3421 - Screenwriting*3 Credits*

The theory and practice of screenwriting in a workshop setting. Offered alternate spring semesters. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 111 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C. Course Attributes: Informed Responses-Aesthetics, Integration Across Disciplines.

ENGL 3431 - Department Newsletter*3 Credits*

Creation of the annual department newsletter; involves interviews, writing articles, layout and design. Must be enrolled in one of the following Departments: English.

ENGL 3511 - English Language*3 Credits*

History of the English language, developments in American and world English, and changes in vocabulary, grammar, phonology, and dialects. Must be enrolled in the English Department; others by permission of instructor. Offered alternate fall semesters. Prerequisite(s): Prerequisite information is available in the online course catalog. Must be enrolled in one of the following Departments: English.

ENGL 3641 - British Novel*3 Credits*

Representative novels, from the early development of the genre in the eighteenth century to romantic and social novels of the nineteenth and experimental novels of the twentieth centuries. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Humanities.

ENGL 3651 - American Novel*3 Credits*

Selected novels from the eighteenth century to the present in the context of diverse literary and social influences. Offered alternate spring semesters. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Humanities.

ENGL 3781 - Journal Publishing*3 Credits*

Hands-on opportunity to learn about scholarly journal publication. Issues of budgeting, layout, and design, creation of style manuals, copy editing and other responsibilities of an editor. Offered alternate spring semesters. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Integration Across Disciplines.

ENGL 3791 - Advanced Professional Writing*3 Credits*

Advanced study and practice of the kinds of internal and external writing used in different organizations—utilities, for-profit corporations, non-profit organizations, and others. May include practice in the researching, writing, and editing of advertising copy, fundraising materials, surveys, reports, market analyses, promotions, product descriptions, grants, propos-

als, etc. Relevant ethical issues will be included. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C. Must be enrolled in one of the following Classifications: Junior, Senior.

ENGL 3811 - Modernist and Contemporary Poetry*3 Credits*

Exploration and contextualization of major writers, poems, and movements in 20th-century American and European poetry. Offered alternate fall semesters. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Humanities, Effective Communication Non-Writing, Informed Responses-Aesthetics.

ENGL 3901 - Special Topics in English*3 Credits*

May be repeated as the topic varies. Unlimited repeats permitted. Course Attributes: Humanities, Requires Department Approval.

ENGL 4051 - Studies in Literary and Cultural Theory*3 Credits*

The academic and professional interpretation of literary and multimedia texts in their social, cultural, and historical contexts. Offered alternate spring semesters. Prerequisite(s): ENGL 2101 Minimum Grade of C or ENGL 210 Minimum Grade of C.

ENGL 4101 - Chaucer*3 Credits*

The poetry of Chaucer, with special emphasis on the Canterbury Tales, Troilus and Criseyde, and reading and understanding Middle English. Prerequisite(s): ENGL 2101 Minimum Grade of C or ENGL 210 Minimum Grade of C.

ENGL 4111 - Topics in Medieval Literature*3 Credits*

Exploration of themes in and cultural contexts of medieval literature, with emphasis on development of skills in literary research and the production of a substantive paper. Prerequisite(s): ENGL 2101 Minimum Grade of C or ENGL 210 Minimum Grade of C.

ENGL 4121 - Shakespeare Studies*3 Credits*

Close reading and analysis of Shakespeare's plays with their historical context, using a variety of critical approaches. Offered alternate fall semesters. Prerequisite(s): ENGL 2101 Minimum Grade of C or ENGL 210 Minimum Grade of C.

ENGL 4231 - 18th Century British Romanticism*3 Credits*

Major works of English prose, poetry and drama from the Restoration (1660) through the Romantic period (approx. 1840) with a concentration on a few writers such as Addison & Steele, Swift, Pope, Coleridge, Byron, Keats, the Shelleys, and Wollstonecraft. Offered alternate fall semesters. Prerequisite(s): ENGL 2101 Minimum Grade of C or ENGL 210 Minimum Grade of C. Course Attributes: Effective Communication Writing.

ENGL 4241 - Victorian Period*3 Credits*

British literature between 1832 and 1901, with an emphasis on cultural and historical contexts. Offered alternate fall semesters. Prerequisite(s): ENGL 2101 Minimum Grade of C or ENGL 210 Minimum Grade of C. Course Attributes: Diversity-Human Interaction, Integration Across Disciplines.

ENGL 4311 - Studies in American Literature*3 Credits*

A major writer, genre, or theme in American literature, with attention to cultural context. Prerequisite(s): Prerequisite information is available in the online course catalog.

ENGL 4321 - Studies in Comparative Literature*3 Credits*

Issues of special interest to English majors about literary texts from ancient times to the present that highlight differences between Western and non-Western literatures. Prerequisite(s): ENGL 2101 Minimum Grade of C or ENGL 210 Minimum Grade of C.

ENGL 4401 - Advanced Poetry Writing

3 Credits

The discipline and technique of advanced poetry writing and analysis, with an introduction to publication possibilities. Workshop and discussion setting. May be continued as ENGL 4961 - Independent Study in Writing. Offered alternate spring semesters. Prerequisite(s): ENGL 3401 Minimum Grade of C or ENGL 341 Minimum Grade of C.

ENGL 4411 - Advanced Fiction Writing

3 Credits

The discipline and technique of writing fiction, with an introduction to publication possibilities. Workshop and discussion setting. May be continued as ENGL 4961 - Independent Study in Writing. Offered alternate spring semesters. Prerequisite(s): ENGL 3411 Minimum Grade of C or ENGL 342 Minimum Grade of C.

ENGL 4421 - Nonfiction Writing

3 Credits

A literary approach to the reading and writing of non-fiction essays. Prerequisite(s): ENGL 2101 Minimum Grade of C or ENGL 210 Minimum Grade of C. Course Attributes: Humanities.

ENGL 4431 - Writing in Digital Environment

3 Credits

Theoretical and social implications of digital writing for personal, professional and academic communication. Emphasis on tools and techniques for analyzing, assessing and doing new media work. Prerequisite(s): ENGL 1221 Minimum Grade of C or ENGL 1231 Minimum Grade of C or ENGL 1421 Minimum Grade of C or ENGL 1521 Minimum Grade of C or HONR 1221 Minimum Grade of C or HONR 1231 Minimum Grade of C. Course Attributes: Humanities.

ENGL 4461 - Capstone Presentation

1 Credit

Oral presentation of the project completed in a designated 3000-4000 level course as a capstone project. Offered fall and spring semesters. Must be enrolled in one of the following Departments: English. Must be enrolled in one of the following Major fields of study: Creative Writing, Journalism, Language Arts Education, Literature, Professional Writing. Course Attributes: Critical and Creative Thinking, Effective Communication Writing, Requires Instructor Approval.

ENGL 4521 - Rhetorical Theory

3 Credits

The history and theory of rhetoric and its practice in contemporary public discourse and media. Offered alternate spring semesters. Prerequisite(s): Prerequisite information is available in the online course catalog. Course Attributes: Integration Across Disciplines.

ENGL 4821 - Professional Writing Internship

1 to 3 Credits Grading mode is S/U

Provides practical experience outside the classroom and enhances the students' professional interests. Courses appropriate for the internship required. Offered fall and spring semesters. This course is repeatable for a total of 15 hours.

ENGL 4822 - Library Studies Internship

1 to 3 Credits Grading mode is S/U

Provides practical experience in library studies outside the classroom to enhance students' professional interests. Offered fall and spring semesters. This course is repeatable for a total of 6 hours.

ENGL 4901 - Special Topics

3 Credits

May be repeated as the topic varies. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

ENGL 4961 - Independent Study in Creative Writing

1 to 3 Credits

May be repeated as the topic varies. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

ENGL 4971 - Independent Study in Literature

1 to 3 Credits

May be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

ENGL 4981 - Independent Study in Professional Writing

1 to 3 Credits

May be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

DEPARTMENT OF HISTORY, POLITICS AND JUSTICE

Professors R. Alexander (*Chair*), Lomax, Loughlin; **Associate Professors** Crawford, D. Smith, Nsia-Pepira; **Assistant Professors** Howe; R. Waters; **Visiting Assistant Professors** Schuck

Department Mission

The mission of History Politics and Justice Department is to graduate students who have the knowledge, skills, and critical thinking ability to achieve success in their post-graduate endeavors. Our graduates, and others who take our courses, will leave ONU equipped to be valuable employees' successful graduate students; and will be effective and active citizens. To ensure this, the majors offered by the department are interdisciplinary, offering students historical, political, and geographical tools that enable them to critically analyze the world around them and act on their conclusions, whether that be locally, nationally, or internationally.

Professional Memberships

Memberships include the Academy of Criminal Justice Sciences, the American Correctional Association, the American Geographical Society, the American Historical Association, and the American Political Science Association, Ohio Council for the Social Studies, North American Society for Sport History, Western Society for French History, Ohio Association of Economists and Political Scientists, Midwest Political Science Association.

Majors, Minors and Degrees Offered

History Major (BA)
Law 3+3 in History (BA)
Law 3+3 in Political Science (BA)
Law 3+3 in Philosophy, Politics and Economics (BA)
Philosophy, Politics, and Economics Major (BA)
Political Science Major (BA)
Social Studies Major (BA)
Asian Studies Minor
Geography/Area Studies Minor
Geography/Geographic Information Systems (GIS) Minor
History Minor
International Studies Minor
Political Science Minor
Public History and Museum Studies Minor
Public Policy Minor

Licensure Offered

- Adolescent Young Adult (7-12) Integrated Social Studies Licensure

Special Programs

Archaeological Field School

The department conducts an Archaeological Field School. It is an ongoing educational program that maximizes student participation and learning at an active archaeological site. Field School is a "teaching through doing" course. It features site work, formal lectures, and informal discussions on archaeology, archaeological methods, and the application of anthropological theory to archaeological discoveries.

Internships and Other Experiential Education

Public service internships are available at all levels of government, including the Ohio and federal legislatures. Public history internships include work in museums and in archival management in addition to research positions with professional historians. Many students intern with private businesses and non-profit organizations. The department also offers students the opportunity to participate in The Washington Center for Internships and Academic Seminars or the Washington Semester program sponsored by American University. A student may apply three credit hours of internship to selected majors and minors and as many as fifteen total credit hours of departmental internship to the Bachelor of Arts degree.

Students annually participate in the National Model United Nations in New York City and the American Mock Trial program in cities such as Chicago, Illinois, and St. Paul, Minnesota. A student may apply three credit hours of Model United Nations to the political science/international politics major and up to nine credit hours to the Bachelor of Arts degree. A student may apply three credit hours of Mock Trial to the criminal justice or political science majors and up to nine credit hours to the Bachelor of Arts degree.

Honoraries

The department has active chapters of Phi Alpha Theta, the national history honorary; Phi Beta Delta, the national honorary for international scholars; Pi Sigma Alpha, the national political science honorary; Studia Socialia Americae, the national social studies honor society, and Gamma Theta Upsilon, the international geographic honor society.

Study Abroad

The department participates in numerous study-abroad programs. Students majoring in history are encouraged to consider direct exchanges at University of Joensuu, the University of Wales, Lampeter, or University of Debrecen, Hungary. Political science students are directed toward Glasgow Caledonian University, University of Debrecen, or the University of Joensuu. Students interested in Asian Studies are encouraged to study in Hanyang University as well as other programs in Korea, China, and Taiwan. Ohio Northern also participates in several study abroad consortia that allow students to pursue study abroad in every part of the world.

Pre-law Program

The Department of History, Politics and Justice participates in the 3+3 Law Admissions Program, so that students majoring in History or Political Science may participate in the program. For more information, see the fuller description on page 22.

Major Course Requirements

Every course required for a major must be completed with a grade of "C" or higher. The capstone requirement for majors in this department is met by successful completion of Senior Thesis 1 and 2 in the appropriate major. To pursue a dual major or a major and a minor, students must complete all requirements for each separate major and minor.

History Major (40 credit hours)

A major in history prepares students for careers in teaching, law, journalism, information management, government service, business, and any other profession that requires verbal skill and analytical reasoning. A history major in combination with a minor in public history/museum studies prepares students to move into entry level positions as a museum curator, museum administrator, or public historian.

HSPS 1001	History, Politics and Justice Orientation (1)
HIST 1101	Western Civilization 1 (3)
HIST 1111	Western Civilization 2 (3)
HIST 2041	Historiography (3)
HIST 2141	United States to 1877 (3)
HIST 2151	United States since 1877 (3)
HIST 3xx1-4xx1	US history elective ¹ (3)
HIST 3xx1-4xx1	European history elective ¹ (3)
HIST 3xx1-4xx1	Non-Western history elective ¹ (3)
HIST 3xx1-4xx1	History elective ¹ (3)
HIST 3xx1-4xx1	History elective ¹ (3)
HIST 4981	Senior Thesis 1 (1)
HIST 4991	Senior Thesis 2 (2)

Other required courses:

PLSC 1011	Introduction to American Politics (3)
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Complete one:

GEOG 2261	World Regional Geography (3)
HSPS 2611	Europe in Transition (3)
HSPS 2621	Asia in Transition (3)
HSPS 2631	Africa in Transition (3)
HSPS 2641	The Middle East in Transition (3)
HSPS 2651	Latin America in Transition (3)

Note:

¹ A student may take HSPS and GGHS courses for HIST elective credit.

Philosophy, Politics and Economics (PPE) (33 credit hours)

PPE is an interdisciplinary major that draws together the knowledge base and intellectual skills of the three component disciplines: philosophy, politics and economics. Philosophy provides students with an understanding of the normative foundations of social organization; political science provides them with an understanding of the workings of social institutions; and economics provides them with the contemporary analysis of market forces and their effects on social issues. All three disciplines hone the critical thinking skills of students as well as their analytical skills in reading and writing, but each of them do so from a different vantage point: philosophy from the normative and theoretical standpoint; political science from the theoretical, empirical, and applied standpoint; and economics from the quantitative standpoint at the levels of both theory and practice.

The breadth of multidisciplinary skills provided by a major in PPE prepares students for a variety of careers in non-profit work, government work, private enterprise and graduate work; it is an especially appropriate preparation for law school.

Requirements for the major can be found on page 126.

Political Science Major (39 credit hours)

A major in political science prepares students for careers in law, government service, public affairs, business, journalism, and information management.

Core: (21 credit hours)

HSPS 1001	History, Politics and Justice Orientation (1)
PLSC 1011	Introduction to American Politics (3)
PLSC 1021	Introduction to International Relations (3)
PLSC 1031	Introduction to Comparative Politics (3)
PLSC 4581	Western Political Thought 1 (3)
	or
PLSC 4591	Western Political Thought 2 (3)
ISR 2531	Research Methods (3)
HSPS 4981	Senior Thesis 1 (1)
	or
PLSC 4981	Senior Thesis 1(1)
HSPS 4991	Senior Thesis 2(1)
	or
PLSC 4991	Senior Thesis 2 (1)

Research/Experiential Component

MLNG 2xx1	Intermediate Modern language 1 (3)
	or
STAT 1561	Statistics for Professionals (3)
	or
GIS 2481	Introduction to Geographic Information Systems (3)
	or
HSPS 4711	Public Service Internship ¹ (3)
	or
PLSC 4711	Public Service Internship ² (3)
OVRC 3xxx1-4xx1	Study Abroad ³ (3)

Electives: 18 hours

6 PLSC 2500 or HSPS classes 2500 and above (2 must be American politics electives and 2 must be International Politics electives)
 PLSC 2500 and above American Politics elective (3)
 PLSC 2500 and above American Politics elective (3)
 PLSC 2500 or HSPS 2500 and above International Politics elective (3)
 PLSC 2500 or HSPS 2500 and above International Politics elective (3)
 Two PLSC 2500 or HSPS 2500 and above courses (6)

Notes:

¹ Students receive 1 credit hour for every 100 on-site hours they work at their internship site. Students must complete 3 credit hours to fulfill the internship requirement (300 total on-site hours) for the experiential elective.

² Students receive 1 credit hour for every 100 on-site hours they work at their internship site. Students must complete 3 credit hours to fulfill the internship requirement (300 total on-site hours) for the experiential elective.

³ The department must approve 3 credit hours of 3xx1-4xx1 level coursework from among the courses that the student has completed at the study abroad site to complete the study abroad experiential elective.

Social Studies Major (102 credit hours)

The social studies major with other required coursework meets the curriculum and experience requirements for the Integrated Social Studies (grades 7-12) teaching license for the state of Ohio. There are special departmental advisors for teacher licensure. Completion of the Social Studies major also completes the requirements for a second major in history.

HSPS 1001	History, Politics and Justice Orientation (1)
HIST 0041	Teacher Licensure Orientation (0)
HIST 2041	Historiography (3)
HIST 2141	United States to 1877 (3)
HIST 2151	United States since 1877 (3)
HIST 3451	African American History (3)
HIST 3xx1/4xx1	US history elective (3)
HIST 3xx1/4xx1	European history elective (3)
HIST 3xx1/4xx1	Non-Western history elective (3)
HIST 3xx1/4xx1	History elective ¹ (3)
HIST/HSPS 4981	Senior Thesis 1 (1)
HIST/HSPS 4991	Senior Thesis 2 (2)
GEOG 2261	World Regional Geography (3)
GEOG 2371	Physical Geography (3)
PLSC 1011	Introduction to American Politics (3)
PLSC 3xx1/4xx1	Political science elective ² (3)
SOC 2501	Cultural Anthropology (3)

Select one:

HSPS 2611	Europe in Transition (3)
HSPS 2621	Asia in Transition (3)
HSPS 2631	Africa in Transition (3)
HSPS 2641	The Middle East in Transition (3)
HSPS 2651	Latin America in Transition (3)

Select one two-course sequence³:

HIST 1101	Western Civilization 1 (3)
HIST 1111	Western Civilization 2 (3)
HIST 1151	World Civilizations 1 (3)
HIST 1161	World Civilizations 2 (3)

Select one:

PLSC 1021	Introduction to International Relations (3)
PLSC 1031	Introduction to Comparative Politics (3)
PLSC 2501	State and Local Politics (3)

Select one:

PSYC 1001	Psychology (3)
SOC 1001	Sociology (3)

Select one:

BIZ 2021	Microeconomic Foundations for Bus. Planning (3)
BIZ 2031	Macroeconomic Foundations for Bus. Planning (3)

Other required courses:

CAMS 1311	Communication in the Classroom ⁴ (3)
EDUC 1151	Culture and Schooling (3) (20 hours field)
EDUC 2101	Exceptional Learners (3) (20 hours field)
EDUC 2681	Curriculum and Assessment (3) (20 hours field)
EDUC 3201	Instructional Media and Educational Technologies (3)
EDUC 3451	Literacy across the Content Areas (3) (20 hours field)
EDUC 4401	Educational Psyc. and Instructional Practices (3) (20 hours field)
EDUC 4451	Leadership Seminar in Education ⁵ (2)
EDUC 4531	Integrated Social Studies Methods (3) (20 hours field)
EDUC 4721	Student Teaching/AYA ⁵ (12)
PSYC 2171	Adolescent Psychology (3)

Notes:

¹ HSPS and GGHS courses may be taken for HIST elective credit.

² An HSPS or GGPS course may be taken for PLSC elective credit.

³ A student with a social studies primary major may substitute World Civilizations 1 and 2 (HIST 1151 and HIST 1161) for the Western Civilization 1 and 2 (HIST 1101 and 1111) requirement of the second major in history.

⁴ Fulfills the communication arts distribution requirement for the Bachelor of Arts degree.

⁵ Leadership Seminar in Education (EDUC 4451) and Student Teaching/AYA (EDUC 4721) must be taken during same semester.

Minor Course Requirements

Every course required for a minor must be completed with a grade of "C" or higher.

Asian Studies Minor (24 credit hours)

The student may take no more than two courses in any subject code. With the approval of the Asian Studies Committee, the student may apply study abroad courses to elective credit.

Select one first-year language sequence:

CHNS 1011	Elementary Chinese 1 (3)
CHNS 1021	Elementary Chinese 2 (3)
	or
JAPN 1011	Elementary Japanese 1 (3)
JAPN 1021	Elementary Japanese 2 (3)
HIST 3131	East Asia to 1800 (3)
	or
HIST 3141	East Asia since 1800 (3)

Select:

HSPS 2621	Asia in Transition (3)
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Select four:

BIZ 3001	Global Environment for Business Planning (3)
GEOG 2261	World Regional Geography (3)
HONR 2021	Asian Music (3)
HSPS 3241	The Middle East in Transition (3)
HSPS 3901*	Special Topics in History and Politics (3)
MUSC 2201	Non-Western Music (3)
PHIL 2431	Asian Philosophies (3)
RELG 2021	Islam (3)
RELG 2031	Eastern Religious Traditions (3)
RELG 2051	Hinduism (3)
RELG 3021	Buddhism (3)
SOC 2501	Cultural Anthropology (3)

*May be repeated once.

Geography/Area Studies Minor (24 credit hours)

GEOG 1001	Introduction to Geography: Methods and Materials (3)
GEOG 2261	World Regional Geography (3)
GEOG 2371	Physical Geography (3)
GEOG 2551	Spatial Methods 1 (3)

Select two:

HSPS 2611	Europe in Transition (3)
HSPS 2621	Asia in Transition (3)
HSPS 2631	Africa in Transition (3)
HSPS 2641	The Middle East in Transition (3)
HSPS 2651	Latin America in Transition (3)
HSPS 4161	Russia and the Near Abroad (3)

Select two:

GEOG 2481	Introduction to GIS (3)
GEOG 2401	Political Geography (3)
GEOG 2421	Population Geography (3)
GGHS 3xx1	Historical geography elective (3)
PLSC 4751	Model UN (3)

Geography/Geographic Information Systems (GIS) Minor (24 credit hours)

GEOG 1001	Geography/Methods & Materials (3)
GEOG 2261	World Regional Geography ¹ (3)
GEOG 2371	Physical Geography ¹ (3)
GEOG 2481	Introduction to GIS (3)
GEOG 2551	Spatial Methods 1 (3)

GEOG 2681 Cartography (3)
or
GEOG 4001 Introduction to Remote Sensing (3)
GEOG 3481 Applied GIS (3)
GEOG 4711 Public Service Internship² (3)

Notes:

¹ With the approval of the academic advisor, the student may substitute one Geography Special Topics course (GEOG 3931 or GEOG 4931) or one Seminar in Geography (GEOG 4941) for World Regional Geography (GEOG 2261) or for Physical Geography (GEOG 2371).

² The student must complete a one-term internship. The student must enroll in at least 1 credit hour of Public Service Internship (GEOG 4711) for each internship experience.

History Minor (21 credit hours)

HIST 1101 Western Civilization 1 (3)
HIST 1111 Western Civilization 2 (3)
HIST 2041 Historiography (3)
HIST 2141 United States to 1877 (3)
HIST 2151 United States since 1877 (3)
HIST 3xx1-4xx1 Non-Western elective (3)
HIST 3xx1-4xx1 History elective1 (3)

Note:

¹A student may take HSPS and GGHS courses for HIST elective credit.

International Studies Minor (21 credit hours)

The International Studies minor allows students to complement their major program through interdisciplinary coursework examining the complex global relationships between nations that shape the world today. The minor provides significant contextual knowledge for students given the growing global interconnectedness across occupations including government, business, health, and engineering).

Core Courses: 6 hours

GEOG 2261 World Regional Geography (3)
PLSC 1021 Introduction to International Relations (3)
or
PLSC 1031 Introduction to Comparative Politics (3)

Complete Two: 6 hours

HSPS 2611 Europe in Transition (3)
HSPS 2621 Asia in Transition (3)
HSPS 2631 Africa in Transition (3)
HSPS 2641 The Middle East in Transition (3)
HSPS 2651 Latin America in Transition (3)

Complete Three: 9 hours

3 courses with the "International Studies Attribute" from catalog courses listed under the HSPS, PLSC, HIST, or GEOG subject codes.

HSPS or PLSC or HIST or GEOG (with International Studies attribute)
HSPS or PLSC or HIST or GEOG (with International Studies attribute)
HSPS or PLSC or HIST or GEOG (with International Studies attribute)

Courses with the International Studies attribute:

GEOG 2401 Political Geography (3)
GEOG 2421 Population Geography (3)
HIST 3131 East Asia to 1800 (3)
HIST 3141 East Asia Since 1800 (3)
HIST 3511 The Crusades (3)
HIST 3551 World War I (3)
HIST 3561 World War II (3)
HIST 3571 Cold War (3)
HIST 3581 Vietnam War (3)
HIST 3701 The Ancient World (3)
HIST 3711 Medieval Europe (3)
HIST 3731 The Age of Revolutions (3)
HIST 3741 Russia to 1905 (3)
HIST 3791 Topics in Modern Europe (3)
HIST 4211 Fascism (3)
HIST 4221 Hitler and Nazism (3)

HIST 4231 The Holocaust (3)
HSPS 2611 Europe in Transition (3)
HSPS 2621 Asia in Transition (3)
HSPS 2631 Africa in Transition (3)
HSPS 2641 The Middle East in Transition (3)
HSPS 2651 Latin America in Transition (3)
HSPS 3901 Special Topics in History and Politics (3)
HSPS 4161 Russia and the Near Abroad (3)
HSPS 4521 American Foreign Relations (3)
HSPS 4531 Spy vs. Spy: Espionage, 1947-Present (3)
PLSC 3301 Comparative Politics of Democracies (3)
PLSC 3311 Comparative Politics in the Developing World (3)
PLSC 3411 Human Rights (3)
PLSC 3421 Conflict Analysis and Resolution (3)
PLSC 3431 Terrorism (3)
PLSC 3441 Wars in Africa (3)
PLSC 3881 International Law and Organizations (3)
PLSC 4921 Special Topics in International Relations (3)
PLSC 4931 Special Topics in Comparative Politics (3)

Political Science Minor (21 credit hours)

PLSC 1011 Introduction to American Politics (3)
PLSC 1021 Introduction to International Relations (3)
or
PLSC 1031 Introduction to Comparative Politics (3)
Complete four (4) three-credit American politics electives (PLSC) at the 2500 and above level (12 credits).
PLSC 4581 Western Political Thought 1 (3)
or
PLSC 4591 Western Political Thought 2 (3)

Note:

¹HSPS and GGPS courses may be taken for political science elective credit.

Public History and Museum Studies Minor (21 credit hours)

A student must complete the core and either the managerial focus or the curatorial focus to complete the minor in public history and museum studies.

HIST 2301 Introduction to Museums and Archives (3)
HIST 3081 Material Culture (3)
HIST 3201 Advanced Public History (3)
HIST 3301 Advanced Local History (3)
HIST 4121 Archaeology Field School (3)
or
HIST 4711 Public Service Internship¹ (3)

Managerial Focus:

Complete two:
CAMS 1201 Introduction to Public Relations (3)
MGMT 4771 Non-Profit Management (3)
PLSC 3661 Public Administration (3)
TAAD 2311 Arts Marketing/Audience Development (3)

Curatorial Focus:

Complete two:
HIST 3071 Introduction to Family History and Genealogy (3)
CAMS 2111 Layout and Design (3)
SOC 2501 Cultural Anthropology (3)
TECH 1421 Web Design (3)

Note:

¹A student must complete 3 credit hours of Public Service Internship (HIST 4711). The student must enroll in at least 1 credit hour of Public Service Internship (HIST 4711) for each internship experience.

Public Policy minor (18 credit hours)

A minor in Public Policy develops skills that are needed for strategic decision-making in business and technical professions, including health, education, and engineering. Public Policy is the product of choices made by governments that drive public investments, create rules, establish services and security, guide and regulate markets and businesses, or allocate benefits and costs to citizens. Students pursuing a Public Policy minor will learn to formulate, evaluate, and promote policy options that can make a difference in their communities. The minor is an excellent complement to students from programs across the university, including business, health, engineering, education, and prelaw.

Core courses:

PLSC 1011	Introduction to American Politics (3)
PLSC 3661	Public Administration (3)
PLSC 3671	Policy Analysis (3)
BIZ 2021	Microeconomics (3)
	or
BIZ 2031	Macroeconomics (3)
PHIL 1051	Ethics, Justice, and Law (3);
	or
PHIL 2401	Professional Ethics (3);
	or
PHIL 3101	Environmental Ethics (3);
	or
PHIL 3441	Ethical Theory (3)

Plus one approved elective from courses satisfying a Public Policy elective

Current approved courses:

PLSC 3211	Political Parties and Interest Groups (3)
PLSC 3231	Mass Media and Politics (3)
PLSC 3411	Human Rights (3)
PLSC 3421	Conflict Analysis and Resolution (3)
PLSC 3431	Terrorism (3)
PLSC 3541	Judicial Process, Behavior, and Impact (3)
PLSC 3881	International Law and Organizations (3)
PLSC 4091	The Presidency (3)
PLSC 4111	Congress (3)
HSPS 4521	American Foreign Relations (3)
HSPS 4531	Spy vs. Spy: Espionage, 1947-Present (3)
GEOG 2481	Introduction to Geographic Information Systems (3)
HIST 1201	Public History (3)
HIST 2301	Introduction to Museums and Archives (3)

Subject - Geography (GEOG)

GEOG 1001 - Introduction To Geography: Methods And Materials

3 Credits

Methods and tools that geographers use to study the complex relationship between place and space. The major academic subdisciplines of geography, including physical geography, political geography, cartography, population geography, historical geography, and GIS. Course Attributes: Social Science, Scientific and Quantitative Literacy.

GEOG 1901 - Special Topics In Geography

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

GEOG 1961 - Independent Study in Geography

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

GEOG 2261 - World Regional Geography

3 Credits

Regional survey of the non-Western world. Examination of the leading cultural, economic, historical, political, and environmental features of the non-Western world. Confers International Politics elective credit. Course Attributes: Non Western Cultural, Social Science, Informed Ethical Responses.

GEOG 2371 - Physical Geography

3 Credits

Basic concepts in physical geography. The atmosphere, the biosphere, the lithosphere, and the hydrosphere. Processes driving physical systems on the earth, interactions among physical systems, human interaction with the physical environment. Basic physical geographic processes and the global geographic patterns. Course Attributes: Social Science.

GEOG 2401 - Political Geography

3 Credits

Geographical examination of state formation, nations, nationalism, sovereignty, and geopolitics. Electoral geography. Concepts of core and periphery. Power and empowerment. Colonialism and post colonialism. Course Attributes: Non Western Cultural, International Studies, Social Science.

GEOG 2421 - Population Geography

3 Credits

Spatial variations in the distribution, composition, migration, and growth of populations in relation to the nature of places. Demography from a geographical perspective. Course Attributes: International Studies, Social Science.

GEOG 2481 - Introduction To Geographic Information Systems

3 Credits

Fundamentals of geographic information systems (GIS). Basic cartographic principles, general geography concepts and spatial analysis, and hardware and software elements of GIS. Lab exercises in various applications of GIS technology to engineering, political science, health, environmental science, business, government, and criminal justice. GIS terminology, raster and vector data structures, data sources and accuracy, methods of data acquisition, conversion, input, and working with spatial databases. Working knowledge of Windows operating system required. Exercises require work in the computer lab outside class hours. Course Attributes: Integration Across Disciplines, Scientific and Quantitative Literacy.

GEOG 2551 - Spatial Methods 1

3 Credits

Introduction to the application of Quantitative and qualitative methods in geography. Quantitative methods, including descriptive statistics; descriptive spatial statistics; normal, Poisson, and binomial probabilities. Introduction to qualitative methods, including interviewing, observation, document analysis, and visual analysis. Course Attributes: Social Science, Scientific and Quantitative Literacy.

GEOG 2561 - Spatial Methods 2

3 Credits

Intermediate application of Quantitative and qualitative methods in geography. Quantitative methods used by geographers, including multivariate analysis, factor analysis, and spatial modeling. Continues discussion on qualitative methods used by geographers. Prerequisite(s): GEOG 2551 Minimum Grade of C. Course Attributes: Social Science, Scientific and Quantitative Literacy.

GEOG 2621 - GIS for Criminal Justice

3 Credits

Spatial aspects of criminal justice. Geographies of crime, policing, and related topics. Course Attributes: Social Science.

GEOG 2641 - GIS for Marketing

3 Credits

Geographies of markets, analysis of the location of markets, spatial and temporal trends, mapping markets, and GIS. Also listed as MRKT 3541. Students who have received credit for MRKT 3541 may not receive credit for GEOG 2641. Course Attributes: Scientific and Quantitative Literacy.

GEOG 2681 - Cartography

3 Credits

The art and science of making maps. The history of map-making, elements of map construction, and properties of map projections. How to construct different kinds of thematic maps and manipulate geographic data to illustrate characteristics of distribution, concentration, or other geographic patterns that promote interpretation of the earth's features. Exercises require work in the computer lab outside class hours. Offered alternate years. Course Attributes: Social Science, Informed Responses-Aesthetics, Scientific and Quantitative Literacy.

GEOG 2901 - Special Topics In Geography

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

GEOG 2961 - Independent Study in Geography

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

GEOG 3021 - Nature Center Seminar In Geography

1 Credit

Weekend seminar at the Metzger Nature Center on a wide range of topics in geography. May be repeated as topic varies. A Nature Center use fee is charged. Unlimited repeats permitted.

GEOG 3041 - Historical Geography

3 Credits

An exploration of the geographies and legacies of local cultures, with emphasis to the Ada region. Topics may include: settlement, Ada formation, Lincoln Highway, warfare, nearby industries, education and Ohio Northern University, architecture diffusion, religious, agriculture, and other topics. Field trips, guest speakers, and creative and interactive projects are important. Students interview locals to glean historical and geographical information, and create desktop documentary videos that demonstrate the importance of the Ada region. Cross-listed as HIST 3041. Students who have received credit for HIST 3041 may not receive credit for GEOG 3041. Course Attributes: Humanities.

GEOG 3481 - Applied Geographic Information Systems

3 Credits

Advanced discussion of spatial interpolations, error, and uncertainty, Global Positioning Systems (GPS), and spatial model-building. Advanced knowledge of GIS theory and science. Computer lab projects geared toward the relevant major. Exercises require work in the computer lab outside class hours. Offered alternate years. Prerequisite(s): GEOG 2481 Minimum Grade of C or GEOG 248 Minimum Grade of C. Course Attributes: Integration Across Disciplines, Scientific and Quantitative Literacy.

GEOG 3901 - Special Topics In Geography

1 to 3 Credits

May be repeated as topic varies. Formerly GEOG 393. Unlimited repeats permitted.

GEOG 3961 - Independent Study in Geography

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

GEOG 4001 - Introduction To Remote Sensing

3 Credits

Principles and application of remote sensing. The fundamental characteristics of electromagnetic radiation, and energy-atmosphere interactions. The design of remote sensing instruments. Techniques to extract problem-solving information from remote sensing data. Emphasis on digital image-processing techniques and the algorithms involved in measurement, analysis, and interpretation of electromagnetic energy collected by remote sensing instruments. Prerequisite(s): GEOG 2481 Minimum Grade of C or GEOG 248 Minimum Grade of C. Course Attributes: Social Science.

GEOG 4711 - Public Service Internship Program

1 to 15 Credits

Field experience in the area of public service. Student works in a close relationship with public offices and officials or approved private agencies and firms. Student must enroll in at least 1 credit hour of Public Service Internship per internship experience. A full time Public Service Internship requires 600 hours of on-site work. Student may apply up to 15 credit hours of departmental internship to the BA degree. Consultation with the department internship committee and completion of the application process; 2.75 GPA. Must be enrolled in one of the following Classifications: Junior, Senior. This course is repeatable for a total of 15 hours.

GEOG 4721 - Seminar - The Washington Center Seminar

3 Credits

Course Attributes: Social Science, Requires Department Approval.

GEOG 4901 - Special Topics In Geography

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

GEOG 4941 - Seminar In Geography

3 Credits

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Social Science.

GEOG 4961 - Independent Study In Geography

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - History (HIST)**HIST 0041 - Teacher Licensure Orientation**

0 Credits Grading mode is S/U

Introduction to the National Council for the Social Studies Ten Themes for Teaching and requirements for teacher licensure. The Ohio State Board of Education requires this course for Social Studies licensure. A Nature Center use fee is charged. Must be enrolled in one of the following Fields of Study: Social Studies.

HIST 1101 - Western Civilization 1

3 Credits

Ideas, attitudes, and institutions basic to civilization as it developed in the West from ancient times to the sixteenth century. Course Attributes: Humanities, Integration Across Disciplines.

HIST 1111 - Western Civilization 2

3 Credits

Ideas, attitudes, and institutions basic to civilization as it developed in the West from the seventeenth century to the present. Course Attributes: Humanities, Integration Across Disciplines.

HIST 1151 - World Civilizations 1

3 Credits

The emergence, development, and interactions of civilizations in Africa, Asia, Europe, and the Americas, from the Neolithic Revolution to 1400 CE. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction, Integration Across Disciplines.

HIST 1161 - World Civilizations 2

3 Credits

The development and interactions of Western and non-Western civilizations from 1400-present. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction, Integration Across Disciplines.

HIST 1201 - Public History

3 Credits

Fundamentals of public history. Investigation, examination, and study of museums and historical societies, historic preservation, material culture, popular culture, and family and ethnic group history. Readings, discussions, demonstrations, and fieldwork. Student who completes HIST 1201 may not enroll in HIST 3201. Course Attributes: Humanities, Diversity-Human Interaction.

HIST 1301 - Local History

3 Credits

Significant aspects of local history for reference and teaching purposes. Investigation, examination, and study of topics and trends in local history theory and practice. Readings, discussions, demonstrations, and fieldwork. Student who completes HIST 1301 may not enroll in HIST 3301. Course Attributes: Humanities, Diversity-Human Interaction, Informed Ethical Responses.

HIST 1401 - America Rising

3 Credits

America rose from isolated colonies to an economic juggernaut between 1600 and the 1890s. The course will consider the effect of European colonization, interaction with Native Americans, colonial struggles leading to independence, the creation of a new republic, the Antebellum Period, the Civil War, and the rise of industrial America. Special consideration given to the struggle over definition of the new republic and its conflict over slavery. Course Attributes: Humanities, Diversity-Human Interaction, Integration Across Disciplines.

HIST 1411 - The American Century

3 Credits

Already an economic power at the end of the 19th century, the United States achieved the status of superpower in the wake of the second World War. This course will consider what Time publisher, Henry Luce famously called the 'American Century.' Special consideration given to the debate over the meaning of 'America' and over the nation's role in the world. Covers the period from the Spanish American War in 1898 to Francis Fukuyama's declaration of the triumph of American-style liberal democracy and free market capitalism in the 1990s. Course Attributes: Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics, Integration Across Disciplines.

HIST 1901 - Special Topics In History

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

HIST 1961 - Independent Study in History

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

HIST 2041 - Historiography

3 Credits

Methods for researching and writing history from textual sources. Examination of major theories and schools of historical writing. Requires a fully documented research paper written predominantly from primary sources. Fulfills the research methods requirement for History and Social Studies majors. Course Attributes: Humanities.

HIST 2141 - United States History To 1877

3 Credits

American colonies and United States from 1492 to 1877. Emphasis on the formation of American political, economic, and social attitudes, their application in the early Republic, the Civil War, and Reconstruction. Course Attributes: Humanities.

HIST 2151 - United States History Since 1877

3 Credits

The United States since the end of Reconstruction. Major topics include the role played by the US in global affairs and US domestic policy. Course Attributes: Humanities.

HIST 2301 - Introduction To Museums And Archives

3 Credits

Theoretical, administrative, and curatorial aspects of museum and archival management and practice. Topics include the growth of museums and archives, the development of private and public institutions, and the manner in which museum and archival collections are gathered, catalogued, utilized, stored, and made available for research, educational and exhibition purposes. Students gain proficiency in PastPerfect. Course Attributes: Humanities, Informed Ethical Responses.

HIST 2501 - Military and Society

3 Credits

The evolving relationship between warfare and the societies that wage wars, from the Middle Ages to the 20th century. The values, attitudes, purposes, and methods that have given direction and shape to military operations in the Western world. Course Attributes: Humanities, Diversity-Human Interaction, Informed Ethical Responses.

HIST 2601 - Sport and Society

3 Credits

History of the rise of sport in America from Colonial Period to the present. Influence of sport on society and of society on sport. Examine influence of technology, economics, politics, race, class, and gender on sport. Course Attributes: Humanities, Critical and Creative Thinking.

HIST 2901 - Special Topics In History

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

HIST 2961 - Independent Study in History

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

HIST 3001 - Myth In History

3 Credits

Analysis of the nature and function of myth in historical societies. Case studies in the mythologies of the ancient Near East, Greece, Rome, northern Europe, the Americas, Australia, and the Pacific. Course Attributes: Humanities.

HIST 3021 - Nature Center Seminar In History

1 Credit

Weekend seminar at the Metzger Nature Center on a wide range of topics in history. May be repeated as topic varies. A Nature Center use fee is charged. Unlimited repeats permitted.

HIST 3041 - Historical Geography

3 Credits

An exploration of the geographies and legacies of local cultures, with emphasis to the Ada region. Topics may include: settlement, Ada formation, Lincoln Highway, warfare, nearby industries, education and Ohio Northern University, architecture diffusion, religious, agriculture, and other topics. Field trips, guest speakers, and creative and interactive projects are important. Students interview locals to glean historical and geographical information, and create desktop documentary videos that demonstrate the importance of the Ada region. Cross-listed as GEOG 3041. Students who received credit for GEOG 3041 may not receive credit for HIST 3041. Course Attributes: Humanities.

HIST 3071 - Introduction To Family History And Genealogy

3 Credits

Genealogical research and practice for understanding family history and social development. Exploration of family records; local, state, and federal records; church records; census records; land and probate records and documents; school records; immigration lists and naturalization records; and miscellaneous records to document specific ethnic origins. Offered alternate years. Course Attributes: Humanities.

HIST 3081 - Material Culture

3 Credits

Material culture as a means of understanding history and the built environment. Interdisciplinary trends in theory and methodology. The importance of material culture analysis to understand issues such as consumption, fashion, gender, technology, built form, and popular contemporary culture. Offered alternate years. Course Attributes: Humanities.

HIST 3131 - East Asia To 1800

3 Credits

Historical evolution of imperial authority in China and Japan. Cultural institutions in China, Japan, Korea and southeast Asia. Cultural interactions between those nations. The beginnings of European penetration into the East. Offered alternate years. Course Attributes: Non Western Cultural, Humanities, International Studies, Diversity-Human Interaction, Effective Communication Writing, Informed Ethical Responses.

HIST 3141 - East Asia Since 1800

3 Credits

Interaction between East and West. Increasing European control over Asia. Attempts to modernize on the Western model. Militarism and Communism in the 20th century. The Asian economic miracles. Offered alternate years. Course Attributes: Non Western Cultural, Humanities, International Studies, Diversity-Human Interaction, Effective Communication Writing, Informed Ethical Responses.

HIST 3201 - Advanced Public History

3 Credits

Fundamentals of public history. Investigation, examination, and study of museums and historical societies, historic preservation, material culture, popular culture, and family and ethnic group history. Readings, discussions, demonstrations, and fieldwork. Requires extensive readings and a research project. Intended for History majors and minors and Social Studies majors. Student who completes HIST 1201 may not enroll in HIST 3201. Course Attributes: Humanities, Diversity-Human Interaction.

HIST 3301 - Advanced Local History

3 Credits

Significant aspects of local history for reference and teaching purposes. Investigation, examination, and study of topics and trends in local history theory and practice. Readings, discussions, demonstrations, and

fieldwork. Requires extensive readings and a research project. Intended for History majors and minors and Social Studies majors. Student who completes HIST 1301 may not enroll in HIST 3301. Course Attributes: Humanities, Diversity-Human Interaction, Informed Ethical Responses.

HIST 3401 - Colonial North America

3 Credits

Colonial North American colonies c. 1550-1763. The land, English and French institutions and interactions, relations with Amerindians, slavery, religious diversity, economic enterprise, and politics. Course Attributes: Humanities.

HIST 3411 - Western Expansion

3 Credits

The American West as frontier, region, and idea. Major Indian cultures of North America. Federal policies. Economic development and its impact on the environment, politics, and culture of the frontier in American society. Course Attributes: Humanities.

HIST 3421 - The Constitutional Era In United States History

3 Credits

The founding of the United States, 1763-1803, with emphasis on the period 1781-1803. Consequences of the French and Indian War. Causes of the American Revolution. The Declaration of Independence and its impact. Government under the Articles of Confederation. Constitutional reform vs. revolution. The Constitution and its passage. The Bill of Rights. Determining the meaning of the Constitution. Course Attributes: Humanities.

HIST 3451 - African American History

3 Credits

The history of the African-American experience from the African beginnings to the present-day. Course Attributes: Humanities.

HIST 3511 - The Crusades

3 Credits

The origins, operations, and effects of the crusading movements of the Middle Ages. The impact of the crusades on the relationship between Christendom and Islam. Course Attributes: Non Western Cultural, Humanities, International Studies, Informed Ethical Responses, Integration Across Disciplines.

HIST 3541 - Civil War and Reconstruction

3 Credits

Origins, operations, and effects of the American Civil War. Team taught course. Course Attributes: Humanities.

HIST 3551 - World War I

3 Credits

Origins, operations, devastation, and longer-term-effects of the war. Biographies, letters, posters, poetry, novels, films, documentaries, and military history. WWI as much as a revolution as a war, from which emerged communism, fascism, Nazism, and an acceleration of modernist and post-modern currents. Course Attributes: Humanities, International Studies, Effective Communication Non-Writing, Informed Responses-Aesthetics, Integration Across Disciplines.

HIST 3561 - World War II

3 Credits

Origins, operations and effects of the war that defined the 20th century. The military, political, and social forces that the war unleashed. Presentation of World War II in popular culture. Course Attributes: Humanities, International Studies.

HIST 3571 - Cold War

3 Credits

Capitalism vs. communism in a race for global dominance from 1945 to 1990. Political and cultural trends in the events of half a century of East-West conflict. Team taught course. Course Attributes: Humanities, International Studies.

HIST 3581 - Vietnam War

3 Credits

The origins, operations, and effects of the wars in Vietnam, from 1945 to the present. Course Attributes: Humanities, International Studies.

HIST 3611 - 20th Century United States Political History

3 Credits

Evolution of U.S. government during the 20th century. Delineation of political eras. How the roles of the three branches of the federal government have changed and how domestic and foreign crises have shaped political and institutional responses and changes. Course Attributes: Humanities, Effective Communication Writing, Informed Responses-Aesthetics.

HIST 3621 - 20th Century United States Cultural History

3 Credits

Changes in U.S. culture through World War I, the 1920s, the Great Depression, World War II, and the Cold War. Emphasis on how these events affected cultural creation and evolution. Course Attributes: Humanities.

HIST 3701 - The Ancient World

3 Credits

The political, social, economic, and cultural development of the Near Eastern, Greek, and Roman civilizations of antiquity. Course Attributes: Humanities, International Studies, Diversity-Human Interaction, Integration Across Disciplines.

HIST 3711 - Medieval Europe

3 Credits

The political, social, economic, and cultural development of Europe from the decline of the Roman Empire to the beginning of the Renaissance, with special attention to the emergence of institutions that shaped the modern world. Course Attributes: Humanities, International Studies, Diversity-Human Interaction, Integration Across Disciplines.

HIST 3731 - The Age Of Revolutions

3 Credits

The American and French Revolutions, Latin American revolutions, the Revolutions of 1830, 1848, and 1870, and the Industrial Revolution. Uncovers parallel patterns and divergences in the organized political violence of the modern Western world. Revolutions in culture, customs, agriculture, industry, science, society, religion, and philosophy as well as political revolutions and revolutionary conflicts. Course Attributes: Humanities, International Studies.

HIST 3741 - Russia To 1905

3 Credits

Russia from its origins to 1905. The Kievan Rus, the Mongols, Muscovy, and imperial Russia under the Romanovs. Examines geography, the conflict of cultures, the development of social, political and religious institutions, and serfdom. Course Attributes: Humanities, International Studies.

HIST 3791 - Topics In Modern Europe

3 Credits

Various topics that provide added depth in various areas of modern European history and allow professors to utilize their areas of expertise more fully. May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Humanities, International Studies.

HIST 3901 - Special Topics In History

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

HIST 3961 - Independent Study in History

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

HIST 4121 - Field School In Archaeology

3 Credits

Basic archaeology and archaeological field work. Curriculum includes survey and excavation; basic geophysical survey methods; preparation of field notes and documentation; and instruction in other fundamental field skills; preparation and identification of recovered artifacts. A Nature Center use fee is charged. Course Attributes: Humanities.

HIST 4211 - Fascism

3 Credits

Origins and nature of fascism. Contrasts the regimes in Italy and Germany with those in Spain, France, and elsewhere. Utilizes biographical, descriptive, analytical, and theoretical approaches. Examines fascist leaders, including Mussolini, Hitler, and Franco, as well as fascist activists, journalists, and intellectuals. Course Attributes: Humanities, International Studies, Critical and Creative Thinking, Effective Communication Non-Writing, Integration Across Disciplines.

HIST 4221 - Hitler And Nazism*3 Credits*

Personal, intellectual, and political biography of Adolf Hitler in the context of his times. Uses original photo documentation to examine Hitler's early life and the pre- and post-WWI historical and intellectual milieu out of which Nazism emerged. Considers the Nazi regime before and during WWII not as a military account of that war. Course Attributes: Humanities, International Studies, Effective Communication Non-Writing, Informed Responses-Aesthetics, Integration Across Disciplines.

HIST 4231 - The Holocaust*3 Credits*

Origins, nature, and implications of the Holocaust. Consideration of the general problem of modern anti-Semitism. Current representations of the Holocaust as keys to understanding the generation of historical meaning in the modern world. Employs documentaries, docudramas, and original photo documentation from Germany, Austria, and important sites in Eastern Europe, including Poland, Hungary, and Ukraine. Course Attributes: Humanities, International Studies, Informed Ethical Responses, Informed Responses-Aesthetics, Integration Across Disciplines.

HIST 4411 - Baseball in American Culture*3 Credits*

Origins and history of baseball from 1840s to the present. Social, political, and economic forces that shaped the game and American culture during that period along with baseball's importance to our history and in the popular culture. Course Attributes: Humanities, Diversity-Human Interaction, Effective Communication Non-Writing, Integration Across Disciplines.

HIST 4421 - Football in America*3 Credits*

Origins and history of football from 1860s to the present. Social, political, and economic forces that shaped the game and American culture. The rise of professional football from obscurity to the most followed sport in America. Course Attributes: Humanities, Diversity-Human Interaction, Effective Communication Non-Writing, Integration Across Disciplines.

HIST 4511 - History of Law*3 Credits*

Evolution of law as an instrument of dispute resolution and social control. Development of the civil law tradition and the English common law tradition to the seventeenth century. Course Attributes: Humanities, Critical and Creative Thinking, Diversity-Human Interaction.

HIST 4711 - Public Service Internship Program*1 to 15 Credits Grading mode is S/U*

Field experience in the area of public service. Student works in a close relationship with public offices and officials or approved private agencies and firms. Student must enroll in at least 1 credit hour of Public Service Internship per internship experience. A full time Public Service Internship requires 600 hours of on-site work. Student may apply 3 credit hours of HIST 4711 to an HIST Elective major requirement. Student may apply up to 15 credit hours of departmental internship to the BA degree. Consultation with the department internship committee and completion of the application process; 2.75 GPA. Must be enrolled in one of the following Classifications: Junior, Senior. This course is repeatable for a total of 15 hours.

HIST 4721 - Seminar - The Washington Center Seminar*3 Credits*

Course Attributes: Humanities, Requires Department Approval.

HIST 4901 - Special Topics In History*1 to 3 Credits*

May be repeated as topic varies. Unlimited repeats permitted.

HIST 4941 - Seminar In History*3 Credits*

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Humanities.

HIST 4961 - Independent Study In History*1 to 3 Credits*

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

HIST 4981 - Senior Thesis 1*1 to 2 Credits*

First part of the two-course departmental Capstone sequence for majors in History and Social Studies. Topic selection; development of bibliography, preliminary thesis, outline for senior thesis; examination of the norms of the discipline; post-graduate planning; selection of thesis director for HIST 4991. Required of History and Social Studies majors. Enrollment at least two semesters before expected semester of graduation. First part of the University General Education Capstone course requirement. Prerequisite(s): HIST 2041 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: History, Social Studies. Must be enrolled in one of the following Classifications: Junior, Senior.

HIST 4991 - Senior Thesis 2*1 to 2 Credits*

Second part of the two-course departmental Capstone sequence for majors in History and Social Studies. Completion of the senior thesis under the direction of a paper director and a second reader. Student must present his or her senior thesis at a public forum. Required of History and Social Studies majors. Enrollment at least one semester before expected semester of graduation. Completes University General Education Capstone course requirement. The senior thesis may be submitted as an artifact for General Education Learning Outcome #2: Critical and Creative Thinking. Prerequisite(s): HIST 4981 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: History, Social Studies. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

Subject - History, Political Science and Justice (HSPS)**HSPS 1001 - Orientation - Department of History, Politics and Justice***1 Credit*

Introduction to the faculty, programs, procedures, and opportunities in the Department of History, Politics and Justice. Exploration of the practical and intellectual dimensions of academic life at Ohio Northern University. Must be enrolled in one of the following Fields of Study: History, Political Science, Social Studies. Must be enrolled in one of the following Classifications: Freshman.

HSPS 1901 - Special Topics In History and Politics*1 to 3 Credits*

May be repeated as topic varies. Unlimited repeats permitted.

HSPS 1911 - ST-Summer Honors Institute*1 Credit Grading mode is S/U*

Topics in the History and Political Science field for the Summers Honors Institute only. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

HSPS 1921 - ST-History & Political Science*3 Credits Grading mode is S/U*

Topics in the History and Political Science field for Summer Honors Institute only. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

HSPS 1961 - Independent Study in History and Politics*1 to 3 Credits*

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

HSPS 2611 - Europe in Transition*3 Credits*

European history, politics, and culture from the end of World War II. The Cold War, European integration, and accelerating globalization. Post-war migrations, immigration, and the periodic challenges from the political extremes. Cultural and intellectual trends. Growing religious and ethnic tensions, especially as they pertain to terrorism. Course Attributes: Humanities, International Studies, Social Science, Critical and Creative Thinking, Effective Communication Non-Writing.

HSPS 2621 - Asia in Transition*3 Credits*

Transformation of political systems, economic systems, societies, culture, art, religion, and the family in Asia since World War II. Course Attributes: Non Western Cultural, Humanities, International Studies, Social Science.

HSPS 2631 - Africa in Transition

3 Credits

The transition of sub-Saharan Africa from traditional society to modernity and from colonialism to independence and state building. Political, economic, social, cultural trends since World War II. Requires integration of readings, audio-visual presentations, discussions, and lectures. Course Attributes: Non Western Cultural, Humanities, Social Science, Diversity-Human Interaction, International Studies.

HSPS 2641 - The Middle East in Transition

3 Credits

The political, economic, social, cultural, and intellectual development of Southwest Asia and North Africa since World War II. The clash of Western and non-Western power centers in the region. The rise of political Islam. Course Attributes: Non Western Cultural, Humanities, International Studies, Social Science, Diversity-Human Interaction, Effective Communication Non-Writing.

HSPS 2651 - Latin America in Transition

3 Credits

The oscillation of Latin America between dictatorship and democracy, the transition from rural to urban societies, and the evolving relationship between Latin America and the world. Political, social, economic, and cultural trends since World War II. Requires integration of readings, audio-visual presentations, discussions, and lectures. Course Attributes: Non Western Cultural, Humanities, International Studies, Social Science, Integration Across Disciplines.

HSPS 2901 - Special Topics In History And Politics

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

HSPS 2961 - Independent Study in History and Politics

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

HSPS 3021 - Nature Center Seminar In History And Politics

1 Credit

Weekend seminar at the Metzger Nature Center on a wide range of interdisciplinary topics in history, politics, and government. May be repeated as topic varies. A Nature Center use fee is charged. Formerly HSPS 302. Unlimited repeats permitted.

HSPS 3901 - Special Topics In History And Politics

1 to 3 Credits

May be repeated as topic varies. Formerly HSPS 392. Unlimited repeats permitted. Course Attributes: Non Western Cultural, International Studies, Effective Communication Non-Writing, Integration Across Disciplines.

HSPS 3961 - Independent Study in History and Politics

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

HSPS 4161 - Russia And The Near Abroad

3 Credits

Comparative study of the transition from autocratic to democratic political systems in the region formerly dominated by the Soviet Union. From Tsarist Russia and the Communist period to present-day efforts of democratization. International Politics Elective. Course Attributes: Non Western Cultural, Humanities, International Studies, Social Science.

HSPS 4521 - American Foreign Relations

3 Credits

Analytical and conceptual overview of the nature of American foreign policy decision-making. Uses case studies to uncover the variables at play in recent American foreign policy. International Politics Elective. Course Attributes: Humanities, International Studies, Social Science, Diversity-Human Interaction, Informed Ethical Responses, Integration Across Disciplines.

HSPS 4531 - Spy vs. Spy: Espionage, 1947-Present

3 Credits

A comprehensive and detailed overview of the US intelligence community from 1947 to the present. Collection and analysis of information. Counter-intelligence and covert action. An overview of foreign intelligence services. The management structure responsible for directing and supervising intelligence organizations and activities. International Politics Elective. Course Attributes: Humanities, International Studies, Social Science.

HSPS 4711 - Public Service Internship Program

1 to 15 Credits

Field experience in the area of public service. Student works in a close relationship with public offices and officials or approved private agencies and firms. Student must enroll in at least 1 credit hour of Public Service Internship per internship experience. A full time Public Service Internship requires 600 hours of on-site work. Student may apply 3 credit hours of HSPS 4711 to an HIST Elective major requirement. Student may apply up to 15 credit hours of departmental internship to the BA degree. Consultation with the department internship committee and completion of the application process; 2.75 GPA. Must be enrolled in one of the following Classifications: Junior, Senior. This course is repeatable for a total of 15 hours. Course Attributes: Requires Department Approval.

HSPS 4721 - Seminar - The Washington Center Seminar

3 Credits

Course Attributes: Humanities, Social Science, Requires Department Approval.

HSPS 4901 - Special Topics In History And Politics

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

HSPS 4941 - Seminar In History And Politics

3 Credits

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Humanities, Social Science.

HSPS 4961 - Independent Study In History And Politics

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

HSPS 4981 - Senior Thesis 1

1 to 2 Credits

First part of the two-course departmental Capstone sequence for majors in History, Political Science and Social Studies who elect to enroll in this course sequence to meet the Capstone requirement. Selection of an interdisciplinary topic; development of bibliography, preliminary thesis, outline for senior thesis; examination of the norms of the disciplines; post-graduate planning; selection of thesis director for HSPS 4991. Required of History, Political Science, and Social Studies majors who elect to enroll in this course sequence to meet the departmental Capstone requirement. Enrollment at least two semesters before expected semester of graduation. First part of the University General Education Capstone course requirement. Prerequisite(s): HIST 2041 Minimum Grade of C or (ISR 2531 Minimum Grade of C and ISR 2541 Minimum Grade of C). Must be enrolled in one of the following Fields of Study: History, History and Political Science, Political Science, Social Studies. Must be enrolled in one of the following Classifications: Junior, Senior.

HSPS 4991 - Senior Thesis 2

1 to 2 Credits

Second part of the two-course departmental Capstone sequence for majors in History, Political Science, and Social Studies. Completion of an interdisciplinary senior thesis under the direction of a paper director and a second reader. Students must present his or her senior thesis at a public forum. Required of History, Political Science, Social Studies majors who elect to enroll in this course sequence to meet the departmental Capstone requirement. Enrollment at least one semester before expected semester of graduation. Completes University General Education Capstone course requirement. The senior thesis may be submitted as an artifact for General Education Learning Outcome #2: Critical and Creative Thinking. Prerequisite(s): HIST 4981 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: History, History and Political Science, Political Science, Social Studies. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

Subject - Leadership Studies (LEAD)**LEAD 4901 - Foundations Of Leadership**

2 Credits

Leadership and how it works. Theories, definitions and models of leadership. Participants interview a contemporary leader, analyze that leader's style, and complete a personal vision statement. Must be enrolled in one of the following Fields of Study: Leadership Studies Option. Must be enrolled in one of the following Classifications: Junior, Senior.

LEAD 4911 - Techniques And Dynamics Of Leadership

2 Credits

Effective techniques and the discernable dynamics of leadership. Leading in groups, team building, problem solving and negotiation, leadership in crises, and getting a foothold in the real world. Participants will be involved in a civic engagement project or an alternate leadership project and report on the same. Must be enrolled in one of the following Fields of Study: Leadership Studies Option. Must be enrolled in one of the following Classifications: Junior, Senior.

LEAD 4921 - Issues In Contemporary Leadership

2 Credits

Effective leadership in the contemporary setting. The use of personal leadership to improve communities. Leadership in an era of social, cultural, racial and gender diversity. Balancing commitments to career, family and community. The future of leadership. Participants will link with an experienced leader for participatory mentoring and report on their experience. Must be enrolled in one of the following Fields of Study: Leadership Studies Option. Must be enrolled in one of the following Classifications: Junior, Senior.

LEAD 4991 - Leadership Practicum

1 to 2 Credits

Field experience in leadership. Significant involvement in a civic project or a major leadership role on campus. Maintenance of a journal that reflects the involvement and reactions to the experience. Additional requirements may be included in the contract. Requires approval of the Leadership Studies Committee and the instructor. May be repeated as topic varies. Must be enrolled in one of the following Fields of Study: Leadership Studies Option. Must be enrolled in one of the following Classifications: Junior, Senior. This course may be repeated 1 time. This course is repeatable for a total of 2 hours. Course Attributes: Requires Department Approval.

Subject - Political Science (PLSC)**PLSC 1011 - Introduction to American Politics**

3 Credits

Constitutional underpinnings, political behavior, processes, and institutions of American national politics. Course Attributes: Social Science, Informed Ethical Responses.

PLSC 1021 - Introduction to International Relations

3 Credits

The relations of states, governments, political movements, and international organizations in the global context. Political actors and their objectives in a world of limited resources. Global collective responses to global problems. Competition between rich and poor nations and between major and minor powers in terms of the collective good. Formerly HSPS 107. Course Attributes: Social Science, Critical and Creative Thinking, Effective Communication Non-Writing.

PLSC 1031 - Introduction to Comparative Politics

3 Credits

Comparative study of political institutions and processes and individual and group behavior. Interrelationships among the historical, cultural, social, and economic characteristics of national political systems. Comparative governmental structures and patterns of mass political behavior. Course Attributes: Non Western Cultural, Social Science, Critical and Creative Thinking, Effective Communication Non-Writing.

PLSC 1901 - Special Topics In Political Science

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

PLSC 1961 - Independent Study in Political Science

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

PLSC 2501 - State and Local Politics

3 Credits

Legal underpinnings, political behavior, processes, and institutions of American states and localities. American Politics Elective. Course Attributes: Social Science, Informed Ethical Responses.

PLSC 2901 - Special Topics In Political Science

1 to 3 Credits

May be repeated as topic varies. Unlimited repeats permitted.

PLSC 2961 - Independent Study in Political Science

1 to 3 Credits

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

PLSC 3021 - Nature Center Seminar In Political Science

1 Credit

Weekend seminar at the Metzger Nature Center on a wide range of topics in politics and government. May be repeated as topic varies. A Nature Center use fee is charged. Unlimited repeats permitted.

PLSC 3061 - Environmental Law

3 Credits

American legal system used to preserve the nation's environment. Significant environmental laws and policies developed for implementation. American Politics Elective. Course Attributes: Social Science.

PLSC 3201 - Topics In American Politics

3 Credits

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Social Science.

PLSC 3211 - Political Parties And Interest Groups

3 Credits

Formation, maintenance, and influence of interest groups and political parties in the United States. American Politics Elective. Course Attributes: Social Science.

PLSC 3221 - Campaigns And Elections

3 Credits

Theory, practice and role of voting behavior in the United States. American Politics Elective. Course Attributes: Social Science, Informed Ethical Responses, Integration Across Disciplines.

PLSC 3231 - Mass Media And Politics

3 Credits

Historical development and contemporary operation of the mass media as they relate to the American political system. American Politics Elective. Course Attributes: Social Science.

PLSC 3241 - Film And Politics

3 Credits

Historical development and contemporary role of films that relate to political processes and institutions. American Politics Elective. Course Attributes: Social Science.

PLSC 3251 - Popular Culture In American Politics

3 Credits

Historical development and contemporary role of popular culture in American politics. American Politics Elective. Course Attributes: Social Science.

PLSC 3301 - Comparative Politics Of Democracies

3 Credits

Comparison of the politics of democracies. The impact of political culture and the operations of governmental institutions, parties, and interest groups on public policy-making. International Politics Elective. Course Attributes: International Studies, Social Science, Diversity-Human Interaction, Effective Communication Non-Writing.

PLSC 3311 - Comparative Politics In The Developing World

3 Credits

Comparison of contemporary politics in developing and non-Western societies. The impact of cultural fragmentation, modernization, social unrest, and rising expectations on the stability and effectiveness of governmental institutions and processes. International Politics Elective. Course Attributes: International Studies, Social Science, Critical and Creative Thinking, Diversity-Human Interaction, Effective Communication Non-Writing.

PLSC 3411 - Human Rights

3 Credits

Philosophical, political, and legal bases of international human rights. The ongoing debate over universality, cultural relativity and human rights, humanitarian intervention and sovereignty, and specific foreign policy choices. Strategies designed to advance human rights and accountability, including the use of military force and the development of international criminal courts, truth commissions, and other forms of transitional justice. International Politics Elective. Course Attributes: International Studies, Social Science, Critical and Creative Thinking, Diversity-Human Interaction.

PLSC 3421 - Conflict Analysis And Resolution*3 Credits*

Underlying causes of conflicts. Dynamics that lead to open expression and escalation of conflict. The strategic choices of adversaries. The intractability of intense conflict. Methods of prevention, negotiation, and third-party intervention that support accommodation, de-escalation, settlement, and transformation. International Politics Elective. Course Attributes: Non Western Cultural, International Studies, Social Science, Integration Across Disciplines.

PLSC 3431 - Terrorism*3 Credits*

Forms of terrorism in the world. Relative threats characteristic of different forms of terrorism. Origins, causes, motivations, scope for growth, and effectiveness of terrorist strategies. The role of the media. Counterterrorist responses, including domestic counterterrorism, international counterterrorism, and intelligence. Effectiveness of these responses. International Politics Elective. Course Attributes: International Studies, Social Science, Critical and Creative Thinking, Diversity-Human Interaction, Effective Communication Non-Writing.

PLSC 3441 - Wars In Africa*3 Credits*

Causes and types of war in Africa. Processes of resolution and management of civil wars by interested stake holders. Global responses, underlying principles for such responses, and their effectiveness. Obstacles to the resolution of civil wars in Africa. International Politics Elective. Course Attributes: Non Western Cultural, International Studies, Social Science, Critical and Creative Thinking, Effective Communication Non-Writing, Integration Across Disciplines.

PLSC 3501 - Constitutional Law And Government*3 Credits*

Social and political forces that shaped constitutional political theory. The interaction of law and politics through the Reconstruction era. Relationship of the Supreme Court with respect to Congress, the executive, states, and emergency powers. American Politics Elective. Course Attributes: Social Science.

PLSC 3511 - Constitutional Law And Civil Liberties*3 Credits*

Late nineteenth, twentieth, and twenty-first century decisions of the Supreme Court pertaining to civil liberties, civil rights, and criminal justice. American Politics Elective. Course Attributes: Social Science.

PLSC 3541 - Judicial Process, Behavior, And Impact*3 Credits*

The roles of lawyers, judges, and juries in the judicial process. The organization and operation of federal and state trial courts. The decision-making process of federal and state appellate courts. The voting behavior of federal and state appellate judges. The impact of appellate court decisions on society and on the operations of criminal justice agencies. American Politics Elective. Course Attributes: Social Science.

PLSC 3661 - Public Administration*3 Credits*

Bureaucrats as actors in the American political system, their sources of power, and their relationship to elected public officials. American Politics Elective. Course Attributes: Social Science.

PLSC 3671 - Policy Analysis*3 Credits*

Basic dynamics and problems of policymaking and the widely used analytical approaches to public policy. American Politics Elective. Course Attributes: Social Science.

PLSC 3881 - International Law And Organizations*3 Credits*

Factors and forces that determine the policies of nation-states with respect to international cooperation. The structure, operation, and legal setting of international politics. The role of IGOs and NGOs. The evolving international legal order. International Politics Elective. Course Attributes: International Studies, Social Science, Critical and Creative Thinking, Effective Communication Non-Writing.

PLSC 3901 - Special Topics In Political Science*1 to 3 Credits*

May be repeated as topic varies. Unlimited repeats permitted.

PLSC 3961 - Independent Study in Political Science*1 to 3 Credits*

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

PLSC 4091 - The Presidency*3 Credits*

Development and operation of the Presidency. American Politics Elective. Course Attributes: Social Science.

PLSC 4111 - Congress*3 Credits*

Structure and operation of Congress. American Politics Elective. Course Attributes: Social Science.

PLSC 4581 - Western Political Thought 1*3 Credits*

Western political theory from Plato, Aristotle, and the Stoics through Machiavelli, the Reformation, and the Wars of Religion. Examines the political and theoretical elements of pre-modern thought. Course Attributes: Social Science, Critical and Creative Thinking, Informed Ethical Responses, Integration Across Disciplines.

PLSC 4591 - Western Political Thought 2*3 Credits*

Western political theory from the Enlightenment through John Rawls. Examines the political and theoretical implications of constitutionalism, contract theory, conservatism, idealism, romanticism, liberalism, utilitarianism, Marxism, anarchism, socialism, elite theories, social Darwinism, racism, anti-Semitism, fascism, feminism, environmentalism, and libertarianism. Confers American Politics Elective credit if not used for Major Course credit. Course Attributes: Social Science, Critical and Creative Thinking, Informed Ethical Responses, Integration Across Disciplines.

PLSC 4711 - Public Service Internship Program*1 to 15 Credits Grading mode is S/U*

Field experience in the area of public service. Student works in a close relationship with public offices and officials or approved private agencies and firms. Student must enroll in at least 1 credit hour of Public Service Internship per internship experience. A full time Public Service Internship requires 600 hours of on-site work. Student may apply up to 15 credit hours of departmental internship to the BA degree. Consultation with the department internship committee and completion of the application process; 2.75 GPA. Must be enrolled in one of the following Classifications: Junior, Senior. This course is repeatable for a total of 15 hours.

PLSC 4721 - Seminar - The Washington Center Seminar*3 Credits Grading mode is S/U*

Course Attributes: Social Science, Requires Department Approval.

PLSC 4751 - Model United Nations*1 to 2 Credits*

Preparation to participate in regional Model United Nations conferences and the National Model United Nations conference in New York City. An integrated simulation of key operations of the United Nations. Travel to New York City in the spring. Student may apply 3 credit hours of Model United Nations to the Political Science/International Politics major (Academic Component). Student may apply up to 9 credit hours of Model United Nations to the BA degree. Open to any major. This course is repeatable for a total of 9 hours. Course Attributes: Effective Communication Non-Writing, Informed Ethical Responses.

PLSC 4761 - Mock Trial*1 to 2 Credits*

Preparation to participate in regional and national mock trial competitions held at various sites throughout the United States. Preparation of both civil and criminal cases, including opening and closing arguments, direct and cross examination of witnesses, and objections. Student may apply 3 credit hours of Mock Trial to the Criminal Justice major or to the Political Science/American Politics major (Academic Component). Student may apply up to 9 credit hours of Mock Trial to the BA degree. Confers up to 3 hours of American Politics Elective credit. Open to any major. This course may be repeated 2 times. This course is repeatable for a total of 9 hours.

PLSC 4901 - Special Topics In Political Science*1 to 3 Credits*

May be repeated as topic varies. Unlimited repeats permitted.

PLSC 4911 - Special Topics in American Politics*1 to 3 Credits*

May be repeated as topic varies. Unlimited repeats permitted.

PLSC 4921 - Special Topics In International Relations*1 to 3 Credits*

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: International Studies.

PLSC 4931 - Special Topics in Comparative Politics*1 to 3 Credits*

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: International Studies.

PLSC 4941 - Seminar In Political Science*3 Credits*

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Social Science.

PLSC 4961 - Independent Study In Political Science*1 to 3 Credits*

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

PLSC 4981 - Senior Thesis 1*1 to 2 Credits*

First part of the two-course departmental Capstone sequence for majors in Political Science. Topic selection; development of bibliography, preliminary thesis, outline for senior thesis; examination of the norms of the discipline; post-graduate planning; selection of thesis director for PLSC 4991. Required of all Political Science majors. Enrollment at least two semesters before expected semester of graduation. First part of the University General Education Capstone course requirement. Prerequisite(s): ISR 2531 Minimum Grade of C and ISR 2541 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Political Science. Must be enrolled in one of the following Classifications: Junior, Senior.

PLSC 4991 - Senior Thesis 2*1 to 2 Credits*

Second part of the two-course departmental Capstone sequence for majors in Political Science. Completion of the senior thesis under the direction of a paper director and a second reader. Student must present his or her senior thesis at a public forum. Required of all Political Science majors. Enrollment at least one semester before expected semester of graduation. Completes University General Education Capstone course requirements. The senior thesis may be submitted as an artifact for General Education Learning Outcome #2: Critical and Creative Thinking. Prerequisite(s): PLSC 4981 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Political Science. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

DEPARTMENT OF HUMAN PERFORMANCE AND SPORT SCIENCES

Associate Professors Hofman, Potkanowicz, Swanson (*Chair*), Wilson, M.;
Assistant Professors Beaschler, Callahan, Durand, Ridenour, Rohan, Simmons, West, Wilson, K., Witte

Mission Statement

The Department of Human Performance and Sport Sciences prepares professionals for teaching, service, research, and/or leadership roles in educational institutions, business and industry, and other agencies. We strive to provide diverse, comprehensive, and life-long learning, while encouraging an appreciation of the importance of health, fitness and sport and their contribution to quality of life.

Vision Statement

The Department of Human Performance and Sport Sciences will continue its commitment to high quality undergraduate education and to achieving meaningful student learning outcomes through active engagement in the teaching-learning interchange, scholarly and creative pursuits, leadership and service to others.

Accreditation

The exercise physiology program is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP) and the Committee on the Accreditation of Exercise Sciences (CoAES).

The athletic training program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).

Majors, Minors and Degrees Offered

Athletic Training Major (BA, BS)

Exercise Physiology Major

Clinical/Research Concentration (BA, BS)

Personal Training/Corporate Fitness Concentration (BA, BS)

Sport Management Major (BA, BS)

Exercise Physiology Minor

Admission Requirements

Students, including transfers, must be accepted into the athletic training program through a secondary competitive admissions process. The formal admittance process occurs at the conclusion of the second semester. Students must meet specific academic and technical standards prior to admittance including a health assessment and vaccination verification. A student desiring to transfer from another college or university must follow the university procedures outlined in the course catalog. Specific athletic training courses may receive transfer credit, but they will only be accepted for graduation if there is documented evidence from the transfer institution that the courses include the same educational competencies and proficiencies as the course(s) they are replacing. Specific requirements may be obtained from the Department of Human Performance and Sport Sciences, the athletic training program director, or the athletic training program website.

Major Course Requirements

Students must earn a grade of 'C' or higher in all courses completed for the major.

Department Requirements

Students must maintain a minimum accumulative 2.00 GPA in order to remain eligible for internships, practicum and clinical experience assignments. Students who have been assigned to an internship, practicum or clinical and who have dropped below an accumulative 2.00 GPA will be immediately removed from that assignment and will not be reassigned to an internship, practicum or clinical until their GPA rises to the minimum accumulative 2.00.

Students are responsible for all costs associated with off-campus internships, practicums or clinical experiences, including, but not limited to, travel to and from the facility or affiliated sites, a criminal background check (BCI and/or FBI), a health assessment, vaccinations, or drug testing, as required by the facility.

Athletic Training Major (71 credit hours)

ATTR 1001	Basic Athletic Training (3)
ATTR 1011	Basic Athletic Training Lab (1)
ATTR 1101	Professional Emergency Care (2)
ATTR 1201	Advanced Weight Control/Sports Nutrition (2)
ATTR 2101	Advanced Strength and Conditioning w/ Lab (3)
ATTR 2401**	AT Clinical Level 1 (2)
ATTR 2451**	AT Clinical Level 2 (2)
ATTR 2601	Evaluation Techniques of AT 1 (3)
ATTR 2651	Evaluation Techniques of AT 2 (3)
ATTR 2801	Athletic Taping and Bracing (1)
ATTR 3101	Therapeutic Modalities in Athletic Training (4)
ATTR 3201	Exercise Rehab in AT (4)
ATTR 3301	Psychosocial Factors of AT (2)
ATTR 3401**	AT Clinical Level 3 (2)
ATTR 3451**	AT Clinical Level 4 (2)
ATTR 3501*	Off-campus AT Clinical Experience (0)
ATTR 4101	Medical Considerations (even years) (3)
ATTR 4201	Trends in Athletic Training (odd years) (3)
ATTR 4401**	AT Clinical Level 5 (2)
ATTR 4451**	AT Clinical Level 6 (2)
ATTR 4601	Senior Seminar in Athletic Training (3)

Other required courses

BIOL 2311	Anatomy and Physiology 1 (3)
BIOL 2321	Anatomy and Physiology 2 (3)
EXPH 1301	Anatomical Structure & Function (3)
EXPH 2201	Kinesiology (3)
EXPH 2301	Exercise Physiology (4)
EXPH 3201	Research and Design (3)
EXPH 4801	Exercise Pathophysiology (3)

Note:

*The credit received for this clinical is given through either AT Clinical Level 3, 4, 5, or 6 (ATTR 3401, 3451, 4401, 4451), one of which is taken concurrently with the Off-Campus AT Clinical Experience.

**Students must earn 2 credits in each of these courses. Depending on the clinical assignment, this course may be taken as a 2-credit course in the fall or spring semester, or may be taken as a 1-credit course fall semester and 1-credit course spring semester for a total of 2 credits.

Exercise Physiology Major (55 or 62 credit hours)

Student majoring in exercise physiology must complete one of two concentrations: clinical/research or personal training/corporate fitness. The 55-62 credit hours listed above includes the 46 credit hours of common courses plus the 16 credit hours required for the clinical/research concentration or the 9 credit hours required for the personal training/corporate fitness concentration.

EXPH 1001	Introduction to Exercise & Health (3)
EXPH 1301	Anatomical Structure and Function (3)
EXPH 1401	Administration of Health Promotion Programs (3)
EXPH 2101	Sports Nutrition and Supplementation (3)
EXPH 2201	Kinesiology (3)
EXPH 2301	Exercise Physiology (4)
EXPH 2401	Practicum 1: Field Experiences in Exercise Physiology (1)
EXPH 3101	Exercise Testing and Prescription I (3)
EXPH 3151	Exercise Testing and Prescription II (3)
EXPH 3201	Research and Design (3)
EXPH 3301	Exercise Management of Chronic Disease (3)
EXPH 3501	Practical Applications of Exercise Programming (3)
EXPH 4201	ECG Analysis and Interpretation (3)

Other required courses

ATTR 1101	Professional Emergency Care (2)
ATTR 2101	Advanced Strength and Conditioning w/Lab (3)

Other non-major required courses

BIOL 2311*	Anatomy and Physiology I (3)
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*Grade of D or better required.

Clinical/Research Concentration (16 credit hours)

BIOL 2321	Anatomy and Physiology 2 (3)
BIOL 3021	Human Anatomy (4)
EXPH 4501	Exercise Physiology Internship (3)
EXPH 4801	Exercise Pathophysiology (3)
EXPH 4851	Exercise Biochemistry (3)

Corporate Fitness/Personal Training Concentration (9 credit hours)

EXPH 3601	Motor Learning (3)
EXPH 4501	Exercise Physiology Internship (3)
EXPH 4701	Advanced Exercise Techniques and Assessments (3)

Sport Management Major (56 credit hours)

SPMG 1001	Introduction to Sport Management (3)
SPMG 2101	Social/Psychological Issues in Sport (3)
SPMG 2201	Promotions/Marketing in Sport (3)
SPMG 2301	Facility/Event Management in Sport (3)
SPMG 3001	Sport Facilities Management Practicum (1)
SPMG 3051	Team Promotions Practicum (1)
SPMG 3101	Organization/Administration in Sport (3)
SPMG 3201	Finance/Economics in Sport (3)
SPMG 4101	Ethics in Sport (3)
SPMG 4201	Legal Issues in Sport (3)
SPMG 4501	Internship in Sport Management (3)

Other required courses

ABUS 2221	Principles of Entrepreneurship (3)
BIZ 2101	Accounting Foundations for Business Planning (3)
BIZ 2331	Behavioral Management (3)
BIZ 2511	Marketing (3)
CAMS 1201	Introduction to Public Relations (3)
CAMS 1301	Presentational Speaking (3)
CAMS 2201	Public Relations Writing (3)
CAMS 3321	Organizational Communication (3)
MRKT 4711	Sales and Customer Relations Management (3)

Minor Course Requirements

Students must earn a grade of 'C' or higher in all courses completed for the minor.

Exercise Physiology Minor (33 credit hours)

EXPH 1001	Introduction to Exercise and Health (3)
EXPH 1301	Anatomical Structure and Function (3)
EXPH 2101	Sports Nutrition and Supplementation (3)
EXPH 2201	Kinesiology (3)
EXPH 2301	Exercise Physiology (4)
EXPH 3101	Exercise Testing and Prescription I (3)
EXPH 3151	Exercise Testing and Prescription II (3)
EXPH 3301	Exercise Management of Chronic Disease (3)

Other required courses

ATTR 1101	Professional Emergency Care (2)
ATTR 2101	Advanced Strength and Conditioning w/Lab (3)
BIOL 2311*	Anatomy and Physiology I (3)

*Grade of 'D' or better required

Subject - Athletic Training (ATTR)

ATTR 1001 - Basic Athletic Training

3 Credits

The prevention, recognition and care of athletic injuries as well as common principles associated with the athletic training profession. Offered fall and spring semesters.

ATTR 1011 - Basic Athletic Training Lab

1 Credit

Lab focusing on skills associated with athletic training including but not limited to: taping, ice and heat application, referral procedures, examination and screening procedures, wound care, etc. Offered fall and spring semesters. Corequisite(s): ATTR 1001. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 1101 - Professional Emergency Care

2 Credits

To provide the citizen responder with the knowledge and practical skills necessary to help sustain life, reduce pain and minimize the consequences of injury or sudden illness until EMS arrives. Skills in first aid and advanced assessment and care of adults, children, and infants including AEDs, BVM, stabilization, transportation, and special resuscitation techniques. American Heart Association Basic Life Support (BLS) for Healthcare Providers and Heartsaver First Aid certifications may be obtained by students who pass written and skill examinations. Course can be taken only once for graduation credit. Course may be repeated once for recertification as space permits. (Fee) Offered fall and spring semesters. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology. This course may be repeated 1 time. This course is repeatable for a total of 2 hours.

ATTR 1201 - Advanced Weight Control/Sports Nutrition

2 Credits

The nutritional requirements for athletes and physically active population. Analyze principles of weight control, including body fat, caloric requirements, effects of exercise and fluid loss/replacement. Recognize disordered eating habits and illnesses associated with poor nutritional habits and implement proper referral procedures. Offered fall semester. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 2101 - Advanced Strength & Conditioning w/ Lab**3 Credits**

Addresses physiological response to exercise, proper and safe methods and techniques of strength training, testing of strength and conditioning, interpreting testing data, and developing proper strength and conditioning programs for various individuals and groups. Proper performance and instruction of strength and conditioning methods will be addressed. Offered spring semester. Prerequisite(s): BIOL 2311. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

ATTR 2301 - Pre-Season Athletic Training Clinical**1 Credit**

Optional, on-campus clinical field experience in pre-season football prior to the start of the academic year. Must have valid First Aid and BLS or CPR PR certifications. Offered fall semester. Prerequisite(s): (ATTR 1001 Minimum Grade of C and ATTR 1011 Minimum Grade of C and ATTR 1101 Minimum Grade of C and ATTR 1201 Minimum Grade of C). Must be enrolled in one of the following Departments: Human Performance & Sport Sciences. Must be enrolled in one of the following Major fields of study: Athletic Training. This course may be repeated 2 times. This course is repeatable for a total of 2 hours.

ATTR 2401 - Athletic Training Clinical Level 1**1 to 2 Credits**

On-campus clinical experience rotation as assigned by the Clinical Education Coordinator. Under the supervision of a preceptor, specific clinical proficiencies and skills will be completed. Must have valid First Aid and BLS or CPR PR certifications. Offered fall and spring semesters. Prerequisite(s): (ATTR 1001 Minimum Grade of C and ATTR 1011 Minimum Grade of C and ATTR 1101 Minimum Grade of C and ATTR 1201 Minimum Grade of C). Must be enrolled in one of the following Major fields of study: Athletic Training. This course may be repeated 2 times. This course is repeatable for a total of 2 hours.

ATTR 2451 - Athletic Training Clinical Level 2**1 to 2 Credits**

On-campus clinical experience rotation as assigned by the Clinical Education Coordinator. Under the supervision of a preceptor, specific clinical proficiencies and skills will be completed. Must have valid First Aid and BLS or CPR PR certifications. Offered fall and spring semesters. Prerequisite(s): ATTR 2401 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Athletic Training. This course may be repeated 2 times. This course is repeatable for a total of 2 hours.

ATTR 2601 - Evaluation Techniques of Athletic Training 1**3 Credits**

General overview of the injury evaluation process including medical terminology and SOAP note writing. Practical application of lower extremity anatomy, neurovascular, pathology, injury evaluation and diagnosis. Offered fall semester. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 2651 - Evaluation Techniques of Athletic Training 2**3 Credits**

Practical application of upper extremity/head and spine anatomy, neurovascular, pathology, injury evaluation and diagnosis. Offered spring semester. Prerequisite(s): ATTR 2601 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 2801 - Athletic Taping and Bracing**1 Credit Grading mode is S/U**

Athletic taping and bracing principles and techniques associated with specialized taping, wrapping, bracing and padding selected joints and body parts. Additional focus will be on concepts regulating design, application, construction, maintenance and reconditioning of immobilization devices. Offered fall semester. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 2901 - Independent Study**1 to 4 Credits**

Individual study of a topic of particular interest to the student. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

ATTR 3101 - Therapeutic Modalities in Athletic Training**4 Credits**

A review of therapeutic modalities used in the athletic training and other rehabilitation settings. To include indications and contraindications as well as the practical application of these modalities as they relate to the healing process. Offered fall semester. Prerequisite(s): ATTR 2651 and EXPH 2301. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 3201 - Exercise Rehab in Athletic Training**4 Credits**

Basic components of a comprehensive rehabilitation program. To concentrate on techniques used in the restoration of flexibility, strength, endurance and functional activity. Selection of therapeutic exercises for injuries and corrective surgeries sustained by the athlete and others actively involved in sports activities. Offered spring semester. Prerequisite(s): ATTR 3101. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 3301 - Psychosocial Factors of Athletic Training**2 Credits**

The psychological and sociocultural factors relative to an athletic population as well as the roles and functions of various health care providers responsible for professional care. Strategies for identifying problems, intervening and making appropriate referrals are presented. Offered spring semester. Prerequisite(s): ATTR 3401. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 3401 - Athletic Training Clinical Level 3**1 to 2 Credits**

On or off-campus clinical experience rotation as assigned by the Clinical Education Coordinator. Under the supervision of a preceptor, specific clinical proficiencies and skills will be completed. Must have valid First Aid and BLS or CPR PR certifications. Offered fall and spring semesters. Prerequisite(s): ATTR 2451 Minimum Grade of C and ATTR 2651 Minimum Grade of C and ATTR 2101 and BIOL 2321 and EXPH 2301. Must be enrolled in one of the following Major fields of study: Athletic Training. This course may be repeated 2 times. This course is repeatable for a total of 2 hours.

ATTR 3451 - Athletic Training Clinical Level 4**1 to 2 Credits**

On or off-campus clinical experience rotation as assigned by the Clinical Education Coordinator. Under the supervision of a preceptor, specific clinical proficiencies and skills will be completed. Must have valid First Aid and BLS or CPR PR certifications. Offered fall and spring semesters. Prerequisite(s): ATTR 3401 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Athletic Training. This course may be repeated 2 times. This course is repeatable for a total of 2 hours.

ATTR 3501 - Off Campus Athletic Training Clinical Experience**0 Credits Grading mode is S/U**

Taken concurrently with ATTR 3401; ATTR 3451; ATTR 4401 or ATTR 4451 indicating involvement in an off-campus clinical experience at a local high school and/or outpatient sports medicine/rehabilitation clinic. Must have valid First Aid and BLS or CPR PR certifications. Offered fall and spring semesters. Prerequisite(s): ATTR 2451 Minimum Grade of C and ATTR 2651 and ATTR 2101 and BIOL 2321 and EXPH 2301. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 4101 - Medical Considerations**3 Credits**

Etiology, recognition, evaluation, treatment and referral of general medical conditions and disabilities. Focus on assessment of body systems. Pharmacological applications relevant to treatment of injuries and illnesses common to athletes. Offered alternate fall semesters. Prerequisite(s): ATTR 2451 and ATTR 2651 and EXPH 2301. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 4201 - Trends in Athletic Training**3 Credits**

Current topical issues affecting Athletic Training Profession include organization and administration topics, legal issues, and selected health issues that are present in the athletic population. Offered alternate fall semesters. Prerequisite(s): ATTR 2451. Must be enrolled in one of the following Major fields of study: Athletic Training.

ATTR 4401 - Athletic Training Clinical Level 5

1 to 2 Credits

On or off-campus clinical experience rotation as assigned by the Clinical Education Coordinator. Under the supervision of a preceptor, specific clinical proficiencies and skills will be completed. Must have valid First Aid and BLS or CPR PR certifications. Offered fall and spring semesters. Prerequisite(s): ATTR 3451 Minimum Grade of C and ATTR 3201. Must be enrolled in one of the following Major fields of study: Athletic Training. This course may be repeated 2 times. This course is repeatable for a total of 2 hours.

ATTR 4451 - Athletic Training Clinical Level 6

1 to 2 Credits

On or off-campus clinical experience rotation as assigned by the Clinical Education Coordinator. Under the supervision of a preceptor, specific clinical proficiencies and skills will be completed. Must have valid First Aid and BLS or CPR PR certifications. Offered fall and spring semesters. Prerequisite(s): ATTR 4401 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Athletic Training. This course may be repeated 2 times. This course is repeatable for a total of 2 hours.

ATTR 4601 - Senior Seminar in Athletic Training

3 Credits

Professional preparation for athletic training students taking the BOC exam. Review of athletic training domains, exam simulations, mock interviews, professional presentations, and practical application of psychomotor skills will be emphasized. Offered spring semester. Prerequisite(s): ATTR 4401. Must be enrolled in one of the following Major fields of study: Athletic Training. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

ATTR 4901 - Independent Study

1 to 4 Credits

Individual study of a topic of particular interest to the student. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Exercise Physiology (EXPH)**EXPH 1001 - Introduction to Exercise & Health**

3 Credits

Examination of basic physiological, fitness and health concepts utilized to promote a healthy, active lifestyle. Topics discussed include exercise prescriptions, health and fitness benefits of exercise, adaptations to exercise training, disease prevention and weight management. Laboratory experiences will focus on basic exercise measurements of health and fitness parameters. Offered fall semester. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 1301 - Anatomical Structure and Function

3 Credits

An introduction to the anatomical structures, physiological systems and functional aspects of allied health. Laboratories focus on identification of important anatomical structure. Does not satisfy any requirements for the major in Biology. Offered spring semester. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 1401 - Administration of Health Promotion Programs

3 Credits

A study of the design implementation, organization, administration and evaluation of health promotion programs: consists of competencies and strategies in administrative tasks, programming, facilities, equipment, marketing, sales, finance and liability. Offered spring semester. Must be enrolled in one of the following Major fields of study: Exercise Physiology.

EXPH 1911 - ST-Summer Honors Institute

1 Credit Grading mode is S/U

Topics in Exercise Physiology. Enrollment is restricted to attendees of the Summer Honors Institute. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

EXPH 2101 - Sports Nutrition and Supplementation

3 Credits

Examination of the role of macro/micronutrients and nutritional supplements in exercise performance. Offered fall semester. Prerequisite(s): EXPH 1001. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 2201 - Kinesiology

3 Credits

Practical analysis of human movement patterns with emphasis on a muscle's action and appropriate strengthening and stretching techniques for the human body. Additional course concepts include Functional Movement Screening (FMS) techniques and Gait analysis via utilization of Dartfish motion analysis software. Offered spring semester. Prerequisite(s): BIOL 2311. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology, Health Education, Physical Education. Course Attributes: Effective Communication Non-Writing.

EXPH 2301 - Exercise Physiology

4 Credits

The physiological basis and application of exercise physiology adaptations to exercise training, fitness and health. Laboratory experiences will expose students to common exercise physiology techniques and evaluations used to assess physical conditioning. Offered spring semester. Prerequisite(s): BIOL 2311. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology. Course Attributes: Critical and Creative Thinking.

EXPH 2401 - Practicum 1: Field Experiences in Exercise Physiology

1 Credit

Observation and participation in a selected and approved allied health setting for a minimum of 30 hours. Offered fall, spring and summer semesters. Courses may be repeated but only 1 hour can count toward graduation. Course must be completed prior to junior year. Must be enrolled in one of the following Major fields of study: Exercise Physiology. Must be enrolled in one of the following Classifications: Sophomore. This course may be repeated 4 times. This course is repeatable for a total of 1 hour.

EXPH 2901 - Independent Study

1 to 4 Credits

Individual study of a topic of particular interest to the student. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

EXPH 3101 - Exercise Testing and Prescription I

3 Credits

Basic and advanced exercise testing, evaluation and programming in healthy and diseased populations. Emphasis will be placed on designing exercise prescriptions using American College of Sports Medicine guidelines. Offered fall semester. Prerequisite(s): EXPH 2301 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 3151 - Exercise Testing and Prescription II

3 Credits

Basic and advanced exercise testing, assessment and interpretation of cardiovascular, respiratory and muscular changes associated with training, aging and disease. Offered spring semester. Prerequisite(s): EXPH 3101 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 3201 - Research and Design

3 Credits

The development, design and critical analysis of scientific research. Topics discussed include scientific research problem development, literature databases and search strategies, experimental design, research methodology and statistical analysis. Offered fall and spring semesters. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 3301 - Exercise Management of Chronic Disease

3 Credits

Research and design of exercise programming strategies appropriate for select populations. Course topics include, but are not limited to: exercise considerations for cardiovascular, pulmonary, metabolic, immunological, neuromuscular, and orthopedic patients as well as adolescents, pregnant women, and geriatric patients. Offered fall semester. Prerequisite(s): EXPH 2301 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 3501 - Practical Applications of Exercise Programming

3 Credits

Examination of current exercise programming strategies, fitness facility operations, professional competencies, and disease state management. Course requires experiences in an exercise environment. Offered fall and spring semester. Prerequisite(s): EXPH 2201 Minimum Grade of C and EXPH 2301 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Exercise Physiology. Must be enrolled in one of the following Classifications: Junior, Senior.

EXPH 3601 - Motor Learning

3 Credits

Motor Learning studies the factors affecting the learning of motor skills. You will be presented with practical knowledge of the processes and variables that influence the rate, level, and retention of skill acquisition. The student will ultimately be able to develop a sound theoretical basis for instruction, coaching and performance enhancement. Offered spring semester. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 4201 - ECG Analysis and Interpretation

3 Credits

Basic electrocardiographic analysis and interpretation of ECGs in healthy and diseased populations. Offered spring semester. Prerequisite(s): EXPH 2201 Minimum Grade of C and EXPH 2301 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Exercise Physiology.

EXPH 4501 - Exercise Physiology Internship

3 Credits

An off-campus, experiential experience designed to provide practical and applied professional experiences in exercise physiology-related professions. Offered Summer, Fall and Spring semesters. Prerequisite(s): EXPH 3151 Minimum Grade of C. Corequisite(s): Must be enrolled in one of the following Major fields of study: Exercise Physiology. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing, Requires Instructor Approval.

EXPH 4701 - Advanced Exercise Techniques and Assessments

3 Credits

This course will examine current exercise industry trends involving advanced exercise modalities. Students will learn the proper exercise biomechanics involved in, but not limited to: TRX training, slideboard training, kettlebell training, and Olympic Weight lifting. Students will also participate in seminar discussions to examine current events in the exercise industry and to prepare for national certification exams from either the American College of Sports Medicine or the National Strength and Conditioning Association. Offered fall semester. Prerequisite(s): EXPH 2201 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Exercise Physiology. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Requires Instructor Approval.

EXPH 4801 - Exercise Pathophysiology

3 Credits

The etiology of health-related disease development (i.e. coronary heart and artery disease, hypertension, diabetes, and hyperlipidemia) and the pharmacological agents prescribed to manage these disease states will be discussed. Offered fall semester. Prerequisite(s): EXPH 2301 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Athletic Training, Exercise Physiology.

EXPH 4851 - Exercise Biochemistry

3 Credits

The examination of energy metabolism and ATP production at rest and during exercise. The major biochemical pathways, enzymes, intermediates and control of carbohydrate, fat and protein metabolism will be discussed. Biochemical pathways covered include glycolysis and gluconeogenesis, beta oxidation and fat biosynthesis, protein and amino acid metabolism, the urea cycle and the glucose/alanine cycle, and mitochondrial respiration and the electron transport chain. Offered fall semester. Prerequisite(s): EXPH 2301 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Exercise Physiology.

EXPH 4901 - Independent Study

1 to 4 Credits

Individual study of a topic of particular interest to the student. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Health Education (HLED)**HLED 1101 - Personal Health Problems**

3 Credits

A theoretical and practical treatment of the concepts of disease prevention and health promotion. Course content includes topics such as emotional health; aging and death; alcohol, tobacco, and drug abuse; physical fitness; nutrition and dieting; consumer health; chronic and communicable diseases; human sexuality; and stress management. Offered fall semester.

HLED 2101 - AIDS & Other STDs

3 Credits

An introductory, non-technical examination of the biological/medical, social, psychological, and other ethical aspects of AIDS and other sexually transmitted diseases. Topics include: history of AIDS; treatment and prevention of HIV/AIDS and STDs; medical aspects of HIV/AIDS; HIV testing; counseling of HIV/AIDS positive individuals; AIDS education within school systems; women and HIV/AIDS; legal and ethical aspects of HIV/AIDS; and living with HIV/AIDS. Offered spring semester.

Subject - Sport Management (SPMG)**SPMG 1001 - Introduction to Sport Management**

3 Credits

Initial introduction to basic concepts, career preparation, professional opportunities, and professional skills necessary to be successful in sport management are explored. Offered fall semester. Open to non-Sport Management majors with the permission of the instructor. Must be enrolled in one of the following Major fields of study: Sport Management.

SPMG 2101 - Social/Psychological Issues in Sport

3 Credits

Analysis of the significance and interrelationship that social history, values, and power structures in and outside of sports influence individual and societal beliefs, attitudes, and practices in sports. Specific focus on the topics of youth, deviance and violence, gender/orientation, race and ethnicity, religion, social class, and future of sports in society are explored in-depth. Offered spring semester. Open to non-Sport Management majors with the permission of the instructor. Must be enrolled in one of the following Major fields of study: Sport Management.

SPMG 2201 - Promotions/Marketing in Sport

3 Credits

The practice of marketing, promotions and sales in the sport marketplace. Introduction to event management, print and broadcast media advertising, marketing strategies, and a class project. Open to Sport Management majors and others with approval of the department chair. Offered fall semester. Must be enrolled in one of the following Major fields of study: Sport Management.

SPMG 2301 - Facility/Event Management in Sport

3 Credits

Explore issues related to facility and event management unique to the sport environment while developing an understanding of successful practices and procedures for managing sport and event enterprises. Focus on the skills necessary for sport and event managers needed for successful human and capital resource management, as well as the financial viability and sustainability of sport facilities. Offered spring semester. Must be enrolled in one of the following Major fields of study: Sport Management.

SPMG 2901 - Independent Study

1 to 4 Credits

Individual study of a topic of particular interest to the student. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

SPMG 3001 - Sport Facilities Management Practicum

1 Credit

Designed to give Sport Management majors the opportunity to experience facilities management through involvement with the sports facilities at the University. Offered fall and spring semesters. Must be enrolled in one of the following Major fields of study: Sport Management. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Requires Instructor Approval.

SPMG 3051 - Team Promotions Practicum

1 Credit

Designed to give Sport Management majors the opportunity to acquire promotional experience through involvement with a sport team at the University. Offered fall and spring semesters. Must be enrolled in one of the following Major fields of study: Sport Management. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Requires Instructor Approval.

SPMG 3101 - Organization/Administration in Sport

3 Credits

Examination of the philosophy, principles, problems, policies and procedures essential in the organization and administration of meaningful programs in sports studies. Offered fall semester. Must be enrolled in one of the following Major fields of study: Sport Management.

SPMG 3201 - Finance/Economics in Sport

3 Credits

The application of economic and financial theories applied to the sports industry in both the professional and the amateur sports markets. The critical and objective evaluation of economic and financial issues that arise in the sports industry. Increase knowledge of various sports markets, while emphasizing the role economics plays in determining outcomes in these markets. Offered spring semester. Must be enrolled in one of the following Major fields of study: Sport Management.

SPMG 4101 - Ethics in Sport

3 Credits

Develops an awareness of the complexities concerning sports litigation, primarily in the focus of educational institutions. To use this new knowledge to assist their professional growth in the field. To have a clear understanding of the law and its fundamental elements. Offered spring semester. Must be enrolled in one of the following Major fields of study: Sport Management.

SPMG 4201 - Legal Issues in Sport

3 Credits

Develops an awareness of the complexities concerning sports litigation, primarily in the focus of educational institutions. To use this new knowledge to assist their professional growth in the field. To have a clear understanding of the law and its fundamental elements. Offered fall semester. Must be enrolled in one of the following Major fields of study: Sport Management.

SPMG 4501 - Internship in Sport Management

3 Credits

An off-campus, experiential experience designed to provide practical and applied professional experiences in sport management-related professions. Offered Summer, Fall and Spring semesters. Corequisite(s): Must be enrolled in one of the following Major fields of study: Sport Management. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing, Requires Instructor Approval.

SPMG 4901 - Independent Study

1 to 4 Credits

Individual study of a topic of particular interest to the student. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

INSTITUTE FOR SOCIAL RESEARCH

Contact: Durkin (*Director*)

Ohio Northern University's Institute for Social Research offers a unique opportunity for students in several of the University's undergraduate programs. The Institute performs surveys, needs assessments, policy evaluations, and other social research tasks as required by public and private agencies in the region.

The institute offers exceptional students opportunities to observe and assist in social, political, and geographical research. Students are assigned increasing levels of responsibility as an important adjunct to their education as social scientists.

ISR 1861, 2861, 3861, and 4861 may count toward students' primary or secondary major, but only 3 credit hours will count for the major and only 9 credit hours will count towards the degree.

Regular course offerings in the Institute for Social Research include a two-semester sequence (ISR 2531 and 2541) in conducting social science investigations. One course focuses on data collection and research methodology, while the second concentrates on the analysis of data and statistical procedures.

Subject - Institute for Social Research (ISR)**ISR 1861 - Social Research Practicum 1**

1 to 4 Credits Grading mode is S/U

Participation in the Institute for Social Research under the direction of a faculty member. Offered fall and spring semesters. Course Attributes: Requires Instructor Approval.

ISR 2531 - Research Methods

3 Credits

Major research techniques including surveys, observation, interviews, use of available data and experiments. Other topics include techniques for sampling, for measurement, and for research. Offered fall semester. Course Attributes: Scientific and Quantitative Literacy.

ISR 2541 - Data Analysis

4 Credits

Concepts and procedures for understanding social science data. Covers both descriptive and inferential statistics, as well as qualitative data analysis. Includes the use of statistical software and emphasizes interpretation of results. Offered spring semester. Prerequisite(s): STAT 1311 Minimum Grade of C or STAT 1561 Minimum Grade of C. Course Attributes: Scientific and Quantitative Literacy.

ISR 2861 - Social Research Practicum 2

1 Credit Grading mode is S/U

Participation in the Institute for Social Research. Work as part of a team, under the direction of a faculty member in the Institute of Social Research. Offered fall and spring semesters. Prerequisite(s): ISR 1861 Minimum Grade of C or ISR 186 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

ISR 3861 - Social Research Practicum 3

1 Credit Grading mode is S/U

Participation in the Institute for Social Research, including some leadership responsibilities under the direction of a faculty member. Offered fall and spring semesters. Prerequisite(s): ISR 2861 Minimum Grade of C or ISR 286 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

ISR 4861 - Social Research Practicum 4

1 Credit Grading mode is S/U

Participation in the Institute for Social Research under the direction of a faculty member. Student assumes responsibility as a project director or assistant project director. Offered fall and spring semesters. Prerequisite(s): ISR 3861 Minimum Grade of C or ISR 386 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

DEPARTMENT OF MATHEMATICS AND STATISTICS

Professors Boyadzhiev, Mi. Caragiu (*Chair*); **Associate Professors** Fuller, Hunt, Johns, Retterer, Robinson, Roepke, Schroeder, Zaki; **Assistant Professor** Rahrig, Wang; **Lecturers** Barnhart, Roll, Rosendale; **Director of the Mathematics Resource Center** Rader

Mission Statement

The mission of the Department of Mathematics and Statistics is to provide an environment in which students grow intellectually and which encourages the continued professional growth of the faculty. To achieve this, the department is committed to introducing students to the concepts used in mathematics, to giving them experiences in the development and application of mathematical theory, to helping them develop their critical and analytical reasoning skills, to exposing them to the relationships between mathematics and other fields of endeavor and to preparing them for their career choices.

Overview Statement

Courses are offered in mathematics and statistics to complement almost all disciplines in the university. In addition, the department cooperates with the Center for Teacher Education in program planning for licensure for those desiring to teach high school or middle school mathematics.

Accreditation

The teacher licensure program in mathematics is nationally accredited by the National Council of Teachers of Mathematics.

Majors, Minors and Degrees Offered

Applied Mathematics Major (BA, BS)

Mathematics Major

Advanced Mathematical Studies Concentration (BA, BS)

Teacher Licensure Concentration (BA, BS)

Statistics Major

Actuarial Science Concentration (BA, BS)

Applied Statistics Concentration (BA, BS)

Applied Mathematics Minor

Applied Statistics Minor

Mathematics Minor

Licensure Offered

Adolescent Young Adult (7-12) Mathematics Licensure

Special Programs

Department faculty are active in several professional organizations, providing students with opportunities for research, presentations, and professional experience. The department offers a Mathematics Co-op Program, providing students the experience of applying mathematical theory in a work environment as a preparation for doing the same in a potential career field.

Major Course Requirements

All required courses in major subject area must be completed with a grade of 'C' or higher. All required courses outside of the major subject area must be completed with a grade of 'D' or higher.

Applied Mathematics Major (46 credit hours)

Applied mathematics is an interdisciplinary major. A student in this major must design a program of study in consultation with his/her Mathematics and Statistics Department advisor. Such a program of study must explicitly list the mathematics and the application area electives the student will take.

MATH 1951	Freshman Seminar (1)
MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
MATH 2631	Calculus 3 (4)
MATH 2651	Differential Equations (4)
MATH 2691	Foundations of Mathematics with Problem Solving (3)
MATH 3261	Linear Algebra (3)
MATH 3631	Complex Variables (3)
MATH 3641	Mathematical Modeling (3)
MATH 3951	Junior Seminar (1)
MATH 4951	Senior Seminar (1)

Select at least one course from two of the following three categories:

Algebraic Mathematics:

MATH 3061	Discrete Mathematics (3)
MATH 3411	Abstract Algebra 1 (3)
MATH 3421	Abstract Algebra 2 (3)
MATH 4411	Number Theory with Applications (3)

Analytic Mathematics:

MATH 3611	Real Analysis 1 (3)
MATH 3621	Real Analysis 2 (3)
MATH 3651	Partial Differential Equations (3)
MATH 4611	Numerical Analysis (3)

Decision Support Mathematics:

MATH 3041	Theory of Interest (3)
MATH 3221	Operations Research (3)
MATH 3601	Mathematical Programming (3)
MATH 4651	Probability Theory (3)

Other required courses

Three departmentally approved major-appropriate courses (9 credit hours) in a specific application area outside of the department.

Mathematics Major (49-90 credit hours)

Students majoring in mathematics must complete one of two concentrations: advanced mathematical studies or teacher licensure. The 49-90 credit hours listed above includes the 27 credit hours of common courses plus the 22 credit hours required for the advanced mathematical studies concentration or the 63 credit hours required for the teacher licensure concentration.

MATH 1951	Freshman Seminar (1)
MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
MATH 2631	Calculus 3 (4)
MATH 2691	Foundations of Mathematics with Problem Solving (3)
MATH 3261	Linear Algebra (3)
MATH 3411	Abstract Algebra 1 (3)
MATH 3611	Real Analysis 1 (3)
MATH 3951	Junior Seminar (1)
MATH 4951	Senior Seminar (1)

Advanced Mathematical Studies Concentration (22 credit hours) Students planning on graduate study in mathematics should fulfill the requirements in this concentration.

MATH 2651	Differential Equations (4)
MATH 3x41-4xx1	Mathematics elective (3)
MATH 3x41-4xx1	Mathematics elective (3)
MATH 3421	Abstract Algebra 2 (3)
MATH 3601	Mathematical Programming (3)
MATH 3621	Real Analysis 2 (3)
MATH 4651	Probability Theory (3)

Teacher Licensure Concentration (63 credit hours) Students completing this concentration will have met the Ohio curriculum and experience requirements for the Adolescent Young Adult (7-12) Integrated Mathematics Teaching License. See the Department of Education for details on this concentration.

MATH 2011	History of Mathematics (3)
MATH 2651	Differential Equations (4)
MATH 3011	Mathematics for Secondary Teachers (3)
MATH 3601	Mathematical Programming (3)
MATH 4211	Foundations of Geometry (3)
STAT 1561	Statistics for Professionals 1 (3)

Required education courses

EDUC 1151	Culture and Schooling (3) (20 hours field)
EDUC 2101	Exceptional Learners (3) (20 hours field)
EDUC 2681	Curriculum and Assessment (3) (20 hours field)
EDUC 3201	Instructional Media and Educational Technologies (3)
EDUC 3451	Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4401	Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4451	Leadership Seminar in Education (2)
EDUC 4541	Integrated Mathematics Methods (3) (20 hours field)
EDUC 4721	Student Teaching – AYA (12)

Required general education courses

CAMS 1311	Communication in the Classroom (3)
PSYC 1001	Psychology (3)
PSYC 2171	Adolescent Psychology (3)

Statistics Major (48-60 credit hours)

Students majoring in statistics must complete one of two concentrations: actuarial science or applied statistics. The 48-60 credit hours listed above includes the 33 credit hours of common courses plus the 27 credit hours required for the actuarial science concentration or the 15 credit hours required for the applied statistics concentration.

MATH 1951	Freshman Seminar (1)
MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
MATH 2631	Calculus 3 (4)
MATH 2691	Foundations of Mathematics with Problem Solving (3)
MATH 3951	Junior Seminar (1)
MATH 4651	Probability Theory (3)
MATH 4661	Mathematical Statistics (3)
MATH 4951	Senior Seminar (1)
STAT 1561	Statistics for Professionals 1 (3)
STAT 2561	Statistics for Professionals 2 (3)
STAT 3501*	Applied Regression and Correlation Analysis (3)

Actuarial Science Concentration (27 credit hours) Students completing this concentration will have taken the necessary coursework to prepare for SOA/CAS preliminary exams P/1 and FM/2. Courses marked with an asterisk (*) have been approved as VEE courses by the Society of Actuaries.

MATH 3041	Theory of Interest (3)
BIZ 2021*	Microeconomic Foundations for Business Planning (3)
BIZ 2031*	Macroeconomic Foundations for Business Planning (3)
BIZ 3621*	Financial Analysis for Business Planning (3)
FINC 3691*	Intermediate Financial Management (3)

Select at least four:

MATH 3611	Real Analysis 1 (3)
MATH 3621	Real Analysis 2 (3)
STAT 3511	Categorical Data Analysis (3)
STAT 3521	Analysis of Variance with Experimental Design (3)
STAT 3531	Survey Sampling Methods (3)
STAT 3541	Nonparametric Statistical Methods (3)
STAT 3551	Applied Probability (3)
STAT 3571	Data Management and Statistical Computing (3)
STAT 3901	Special Topics in Statistics (3)
STAT 4561	Introduction to Stochastic Processes (3)
STAT 4571	Linear Statistical Models (3)
STAT 4901	Special Topics in Statistics (3)

Applied Statistics Concentration (15 credit hours)

STAT 3511	Categorical Data Analysis (3)
STAT 3521	Analysis of Variance with Experimental Design (3)

Select at least three:

MATH 3041	Theory of Interest (3)
MATH 3611	Real Analysis 1 (3)
MATH 3621	Real Analysis 2 (3)
STAT 3531	Survey Sampling Methods (3)
STAT 3541	Nonparametric Statistical Methods (3)
STAT 3551	Applied Probability (3)
STAT 3571	Data Management and Statistical Computing (3)
STAT 3901	Special Topics in Statistics (3)
STAT 4561	Introduction to Stochastic Processes (3)
STAT 4571	Linear Statistical Models (3)
STAT 4901	Special Topics in Statistics (3)

Minor Course Requirements

A student may earn at most one minor from the Department of Mathematics and Statistics. A student may earn an applied statistics minor with either a mathematics or an applied mathematics major. No other major-minor combination within the department is allowed. All courses required for a minor must be completed with a grade of 'C' or higher.

Applied Mathematics Minor (22 credit hours)

MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
MATH 2631	Calculus 3 (4)
MATH 2651	Differential Equations (4)

Select at least two:

CHEM 2481	Chemical Applications of Mathematics (3)
MATH 3041	Theory of Interest (3)
MATH 3061	Discrete Mathematics (3)
MATH 3221	Operations Research (3)
MATH 3631	Complex Variables (3)
MATH 3641	Mathematical Modeling (3)
MATH 3651	Partial Differential Equations (3)
MATH 4411	Number Theory w/ Applications (3)
MATH 4611	Numerical Analysis (3)
MATH 4651	Probability Theory (3)
STAT 3501	Applied Regression and Correlation Analysis (3)
STAT 3551	Applied Probability (3)
STAT 4561	Intro to Stochastic Processes (3)
STAT 4571	Linear Statistical Models (3)

Applied Statistics Minor (18 credit hours)

STAT 1561 ¹	Statistics for Professionals 1 (3)
STAT 2561	Statistics for Professionals 2 (3)

Select at least two courses (6 credit hours) from fundamental statistics:
Fundamental Statistics:

STAT 3501	Applied Regression and Correlation Analysis (3)
STAT 3511	Categorical Data Analysis (3)
STAT 3521	Analysis of Variance with Experimental Design (3)
STAT 3531	Survey Sampling Methods (3)

Select at least one additional course (3 credit hours) from fundamental statistics or advanced statistics:

Advanced Statistics:

STAT 3541	Nonparametric Statistical Methods (3)
STAT 3551	Applied Probability (3)
STAT 3571	Data Management and Statistical Computing (3)
STAT 3901	Special Topics in Statistics (3)
STAT 3911	Special Topics in Statistics (3)
STAT 4561	Introduction to Stochastic Processes (3)

Select at least one additional departmentally approved quantitative course (3 credit hours).

¹Pharmacy students may substitute MATH 1471 and STAT 1761 for STAT 1561 and STAT 2561.

Mathematics Minor (24-25 credit hours)

MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
MATH 2631	Calculus 3 (4)
MATH 2691	Foundations of Mathematics with Problem Solving (3)

Select one:

MATH 3261	Linear Algebra (3)
MATH 2651	Differential Equations (4)

Select at least one from each of the following:

MATH 2651-4xx ¹	Math elective (3)
MATH 3041-4xx ¹	Math elective (3)

¹The following cannot be used as electives: MATH 3011, 3951, 4401, and 4951.

Subject - Mathematics (MATH)

MATH 1201 - Mathematics for Liberal Arts

3 Credits

This is a mathematics course for non-math, non-science majors. It provides an opportunity for students to see mathematics used in ways not emphasized in traditional courses. It covers a variety of topics which may include, but is not limited to, problem solving, set theory, logic, graph theory, numeration systems, number theory, modeling, consumer mathematics, apportionment, voting methods, and counting techniques. Offered fall and spring semesters. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1251 - College Algebra

3 Credits

The real number system, exponents, polynomials, factoring, rational expressions, equations and inequalities, functions and their graphs, polynomial and rational functions. Not open for credit to students who have received a grade of C or better in any higher numbered course. Offered fall and spring semesters. Course Attributes: Mathematics & Statistics.

MATH 1401 - Functions for Science and Technology

3 Credits

Functions and their graphs, exponential and logarithmic functions, trigonometric functions, analytic trigonometry, analytic geometry. Not open to any student who has received a grade of C or higher in any calculus course. Offered fall semester. Prerequisite(s): MATH 1251 or ACT Math 21 or SAT Mathematics 540. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1431 - Calculus for Science and Technology

3 Credits

Applying mathematical techniques to problems in science and technology, including analysis, formulation, and problem solutions. Techniques of differentiation, max/min problems, and elementary techniques of integration. Not open to students who have received a grade of C or higher in any other calculus course. Offered fall and spring semesters. Prerequisite(s): (MATH 1401 or ACT Math 23 or SAT Mathematics 570). Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1461 - Calculus for Life Sciences

3 Credits

Concepts of differentiation and integration applied to algebraic, exponential, and logarithmic functions. Not open to students who have received a grade of C or higher in any other calculus course. Offered fall and spring semesters. Prerequisite(s): MATH 1251 or MATH 1401 or ACT Math 23 or SAT Mathematics 570. May not be enrolled in one of the following Colleges: Pharmacy. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1471 - Calculus and Probability in Life Sciences

3 Credits

Concepts of differentiation and integration applied to algebraic, exponential, and logarithmic functions. Descriptive statistics, binomial and normal distributions. Prerequisite(s): MATH 1251 or ACT Math 23 or SAT Mathematics 570. Must be enrolled in one of the following Colleges: Pharmacy. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1611 - Calculus w/Precalculus 1

4 Credits

A fast-paced review of algebraic and trigonometric functions. Limit of a function, continuity, the derivative, and the antiderivative. Introduction to definite and indefinite integrals and the Fundamental Theorem of Calculus. Two years high school algebra and one-half year high school trigonometry required. Formerly MATH 157. Offered fall semester. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1621 - Calculus w/Precalculus 2

4 Credits

Continued development of differentiation techniques, extrema, Mean Value Theorem, curve plotting, other applications of the derivative, continued development of integration techniques and their applications, and calculus of exponentials and logarithms. Formerly MATH 159. Offered spring semester. Prerequisite(s): MATH 1611. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1631 - Calculus 1

4 Credits

Limit of a function, continuity, the derivative, extrema, Mean Value Theorem, curve plotting, applications of the derivative, introduction to integration and its applications. Two years high school algebra and one-half year high school trigonometry required. Formerly MATH 163. Offered fall and spring semesters. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1641 - Calculus 2

4 Credits

Inverse functions; logarithmic, exponential, inverse trig, hyperbolic and inverse hyperbolic functions; sequences and series; Taylor series; parametric curves; polar coordinates; conic sections. Formerly MATH 165. Offered fall and spring semesters. Prerequisite(s): MATH 1621 or MATH 1631. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1661 - Fundamental Mathematics 1

3 Credits

Problem solving skills and techniques, elementary set theory, whole numbers, integers, theory of arithmetic, and introductory number theory. Formerly MATH 172. Offered fall semester. Must be enrolled in one of the following Fields of Study: Early Childhood Education, Middle Childhood Education. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1671 - Fundamental Mathematics 2*3 Credits*

Rational and real numbers, introduction to the fundamentals of counting, probability and statistics, geometric figures, measurement, congruence, symmetry, constructions, transformations, and similarity. Formerly MATH 173. Offered spring semester. Must be enrolled in one of the following Fields of Study: Early Childhood Education, Middle Childhood Education. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

MATH 1901 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 190. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

MATH 1911 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 190. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

MATH 1951 - Freshman Seminar*1 Credit*

Familiarization with the Mathematics and Statistics Department, requirements for majors, planning a program of courses, university catalog, career planning, and problem-solving. Must be enrolled in one of the following Fields of Study: Applied Mathematics, Mathematical Statistics, Mathematics, Statistics. This course is repeatable for a total of 1 hour.

MATH 2011 - History of Mathematics*3 Credits*

An introduction to the history and origin of mathematics, restricted principally to mathematics through elementary calculus. A chronological study of some mathematicians and their contributions to mathematical thought. Formerly MATH 245. Offered spring semester. Prerequisite(s): MATH 1431 or MATH 1461 or MATH 1621 or MATH 1631. Course Attributes: Mathematics & Statistics, Integration Across Disciplines.

MATH 2631 - Calculus 3*4 Credits*

Vectors and vector valued functions, planes and lines in space, multivariate functions, differential and integral calculus of multivariate functions. Formerly MATH 263. Offered fall and spring semesters. Prerequisite(s): MATH 1641. Course Attributes: Mathematics & Statistics.

MATH 2651 - Differential Equations*4 Credits*

Matrices and vector spaces; bases and dimension; first and second order linear differential equations with applications, Laplace transforms. Formerly MATH 275. Offered fall and spring semesters. Prerequisite(s): MATH 1641. Course Attributes: Mathematics & Statistics.

MATH 2691 - Foundations of Mathematics with Problem Solving*3 Credits*

A hands-on introduction to problem solving strategies and techniques of formal proof. Formerly MATH 294. Students who have not taken a MATH class for two semesters or more must have department approval to take this course. Offered spring semester. Prerequisite(s): MATH 1641 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 2901 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 290. Course Attributes: Requires Instructor Approval.

MATH 2911 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 290. Course Attributes: Requires Instructor Approval.

MATH 2921 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 290. Course Attributes: Requires Instructor Approval.

MATH 2931 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 290. Course Attributes: Requires Instructor Approval.

MATH 2971 - Independent Study*1 to 4 Credits*

Formerly MATH 297. This course may be repeated 2 times.

MATH 3011 - Mathematics for Secondary Teachers*3 Credits*

To include topics from problem solving, probability, number theory, number systems, trigonometry, mathematical induction, geometry, graph theory, and discrete mathematics. Formerly MATH 301. Offered alternate fall semesters. Prerequisite(s): MATH 2691 Minimum Grade of C. Course Attributes: Mathematics & Statistics, Effective Communication Non-Writing, Informed Responses-Aesthetics.

MATH 3041 - Theory of Interest*3 Credits*

General theories of interest rates and factors, level and varying annuities, non-annual interest rates and annuities, loan repayment, bond valuation, and additional topics in financial analysis. Course will serve as an introduction to the material covered on the SOA/CAS Actuary Exam FM/2. Prerequisite(s): MATH 1631. Corequisite(s): MATH 1641. Course Attributes: Mathematics & Statistics, Integration Across Disciplines.

MATH 3061 - Discrete Mathematics*3 Credits*

An introduction to discrete mathematical structures: sets, logic, combinatorics, relations and digraphs, functions, integers and related algorithms, partially ordered sets, lattices and Boolean algebras, Karnaugh maps, elementary graph theory. Formerly MATH 336. Offered fall and spring semesters. Prerequisite(s): MATH 1641 Minimum Grade of C or MATH 1631 or MATH 1621 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3221 - Operations Research*3 Credits*

Linear programming, simplex method, duality, sensitivity analysis, PERT/CPM. Standard O.R. applications including transportation, maximum flow, and shortest path problems, among others. Formerly MATH 332. Offered alternate spring semesters. Prerequisite(s): MATH 2651 Minimum Grade of C or MATH 3261 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3241 - Topology*3 Credits*

Metrics and metric spaces, topological spaces, topological invariants. Examples in real space and more general topological spaces. Formerly MATH 324. Offered alternate spring semesters. Prerequisite(s): MATH 2691 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3261 - Linear Algebra*3 Credits*

Finite and infinite dimensional vector spaces over a field, linear transformations, inner product spaces, and canonical forms. Formerly MATH 372. Offered fall semester. Prerequisite(s): MATH 2691 Minimum Grade of C or MATH 3061 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3411 - Abstract Algebra 1*3 Credits*

An introduction to algebraic structures; groups, rings and fields. Formerly MATH 311. Offered fall semester. Prerequisite(s): MATH 2691 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3421 - Abstract Algebra 2*3 Credits*

A continued study of groups, rings, and fields. Formerly MATH 312. Offered alternate spring semesters. Prerequisite(s): MATH 3411 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3601 - Mathematical Programming*3 Credits*

Programming concepts and techniques. Programming applications using MATLAB, Visual Basic for Applications, or a programmable calculator. Introduction to Maple. Use of Equation Editors. Formerly MATH 360. Offered spring semester. Prerequisite(s): MATH 2651 Minimum Grade of C or MATH 3261 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3611 - Real Analysis 1*3 Credits*

Real numbers, sequences, limits of functions, continuous functions. Formerly MATH 352. Offered fall semester. Prerequisite(s): MATH 2691 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3621 - Real Analysis 2*3 Credits*

Continuous functions. Differentiation, derivative theorems, Taylor's formula. The Riemann integral and properties of integrals. Formerly MATH 353. Offered alternate spring semesters. Prerequisite(s): MATH 3611 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3631 - Complex Variables*3 Credits*

Complex algebra, complex calculus, analytic functions, infinite series over the complex plane, theory of residues, conformal mapping. Formerly MATH 363. Offered alternate spring semesters. Prerequisite(s): MATH 2631 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3641 - Mathematical Modeling*3 Credits*

An introduction to discrete and applied mathematical modeling and methods. Topics may include discrete dynamical systems, Markovian population models, continuous models, dimensional analysis and scaling, perturbation methods, and variational methods. Prerequisite(s): MATH 2631. Course Attributes: Mathematics & Statistics.

MATH 3651 - Partial Differential Equations*3 Credits*

First-order equations: the method of characteristics and systems of first-order equations. Second-order equations: the Cauchy-Kowaleskaya theorem, canonical forms of second-order equations, Fourier series, Fourier integrals, boundary-value and initial-value problems. Formerly MATH 362. Offered alternate spring semesters. Prerequisite(s): MATH 2631 Minimum Grade of C and MATH 2651 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 3801 - Professional Practice*1 Credit Grading mode is S/U*

Cooperative education at an off-campus site. Involvement in full-time work (40 hours per week or more) requiring knowledge and skills in the major. See the description of the co-op program in the department narrative for details. Must have a minimum 2.5 GPA and acceptance into the Co-op program. Must be enrolled in one of the following Major fields of study: Applied Mathematics, Mathematical Statistics, Mathematics, Statistics. Must be enrolled in one of the following Classifications: Junior, Senior. This course may be repeated 3 times.

MATH 3901 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 390. Course Attributes: Requires Instructor Approval.

MATH 3911 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 390. Course Attributes: Requires Instructor Approval.

MATH 3921 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 390. Course Attributes: Requires Instructor Approval.

MATH 3931 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 390. Course Attributes: Requires Instructor Approval.

MATH 3951 - Junior Seminar*1 Credit*

Career options. Graduate and professional school options. Attendance at department seminars and capstone presentations. Self-evaluation of progress in the major. Preparation for MATH 4951 - Senior Seminar including selection of senior capstone advisor and research topic. Formerly MATH 370. Offered spring semester. Must be enrolled in one of the following Fields of Study: Applied Mathematics, Mathematical Statistics, Mathematics, Statistics. Must be enrolled in one of the following Classifications: Junior, Senior.

MATH 4211 - Foundations of Geometry*3 Credits*

An axiomatic approach to geometry including the concepts of incidence, ordering, separation, and congruence in incidence, affine, Euclidean, and non-Euclidean geometries. Formerly MATH 421. Offered alternate fall semesters. Prerequisite(s): MATH 2691 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 4401 - Mathematics Internship*1 to 8 Credits*

Formerly MATH 470. Must be enrolled in one of the following Fields of Study: Applied Mathematics, Mathematical Statistics, Mathematics. Must be enrolled in one of the following Classifications: Junior, Senior.

MATH 4411 - Number Theory w/Applications*3 Credits*

An introduction to number theory, modular arithmetic and finite fields, with applications to pseudo-random sequences, cryptography and coding theory. Formerly MATH 411. Offered alternate spring semesters. Prerequisite(s): MATH 1631 Minimum Grade of C or MATH 1621 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 4611 - Numerical Analysis*3 Credits*

Review of programming concepts using MATLAB or other programming software. Errors that occur in representing numbers on a computer and approximating solutions; methods for locating roots of a non-linear equation; interpolation, numerical differentiation; and numerical integration. Numerical solution of differential equations and of systems of linear algebraic equations. Splines. Formerly MATH 461. Offered alternate spring semesters. Prerequisite(s): MATH 2651 Minimum Grade of C and MATH 3601 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 4651 - Probability Theory*3 Credits*

Axioms of probability theory; Discrete and continuous random variables; multivariate distributions; functions of random variables; Central Limit Theorem. Formerly MATH 480. Offered alternate fall semesters. Prerequisite(s): MATH 2631 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 4661 - Mathematical Statistics*3 Credits*

Sampling distributions; Central Limit Theorem; point and confidence interval estimation; hypothesis testing. Formerly MATH 481. Offered alternate spring semesters. Prerequisite(s): MATH 4651 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

MATH 4901 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 490. Course Attributes: Requires Instructor Approval.

MATH 4911 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 490. Course Attributes: Requires Instructor Approval.

MATH 4921 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 490. Course Attributes: Requires Instructor Approval.

MATH 4931 - Special Topics in Mathematics*1 to 3 Credits*

Formerly MATH 490. Course Attributes: Requires Instructor Approval.

MATH 4951 - Senior Seminar*1 Credit*

The student prepares a paper and gives a presentation based on the work done in both MATH 3951 - Junior Seminar and this course. Formerly MATH 493. Offered fall and spring semesters. Prerequisite(s): MATH 3951 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Applied Mathematics, Mathematical Statistics, Mathematics. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

MATH 4961 - Seminar in Mathematics

1 to 3 Credits

Formerly MATH 494.

MATH 4971 - Independent Study

1 to 4 Credits

Formerly MATH 497. This course may be repeated 2 times.

Subject - Statistics (STAT)**STAT 1311 - Introduction to Statistical Reasoning**

3 Credits

Conceptual understanding and interpreting of statistical ideas; statistical literacy; numerical and graphical descriptions of data; normal distributions; probability, correlation, estimation and hypothesis testing. Cannot be taken for credit if credit has been received for STAT 1561, STAT 1761, STAT 2501 or PSYC 2401. Two years of high school algebra required. Formerly STAT 142. May not be enrolled in one of the following Major fields of study: Applied Mathematics, Mathematical Statistics, Mathematics, Statistics. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

STAT 1561 - Statistics for Professionals 1

3 Credits

Describing data graphically and numerically; describing bivariate data; probability concepts; random variables and probability distributions (both discrete and continuous); sampling distributions; statistical inference (point estimation, confidence intervals, hypothesis testing) for a single mean and the difference between two means; statistical study designs. Formerly STAT 156. A student can only receive credit for one of the following courses: STAT 1561, STAT 1761, STAT 2501 or PSYC 2401. Two years of high school algebra required. Offered fall and spring semesters. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

STAT 1761 - Statistics for Pharmacy

3 Credits

Sampling distributions: Statistical inference (point estimation, confidence intervals, hypothesis testing) for single means and proportions, and the difference between two means and proportions: Simple linear regression; Chi-square GOF test and tests of association; ANOVA; Statistical study designs. A student can only receive credit for one of the following courses: STAT 1561, STAT 1761, STAT 2501 or PSYC 2401. Two years of high school algebra required. Offered fall and spring semesters. Prerequisite(s): MATH 1471 or MATH 1631. Must be enrolled in one of the following Colleges: Pharmacy. Course Attributes: Mathematics & Statistics.

STAT 1901 - Special Topics in Statistics

1 to 3 Credits

Formerly STAT 190. Prerequisite(s): STAT 1311 Minimum Grade of C or STAT 1561 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

STAT 1911 - Special Topics in Statistics

1 to 3 Credits

Formerly STAT 190. Prerequisite(s): STAT 1311 Minimum Grade of C or STAT 1561 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

STAT 1921 - Special Topics in Statistics

1 to 3 Credits

Formerly STAT 190. Course Attributes: Requires Instructor Approval.

STAT 1931 - Special Topics in Statistics

1 to 3 Credits

Formerly STAT 190. Course Attributes: Requires Instructor Approval.

STAT 2501 - Statistics for Scientists and Engineers

3 Credits

Basic statistical techniques; random variables and probability distributions; sampling distributions; statistical inference (point estimation, confidence intervals, hypothesis testing) for a single mean and the difference between two means; statistical inference (point estimation, confidence intervals, hypothesis testing) for a single proportion and the difference

between two proportions; statistical study designs; Formerly STAT 280. A student can only receive credit for one of the following courses: STAT 1561, STAT 1761, STAT 2501 or PSYC 2401. Offered fall semester. Prerequisite(s): MATH 1631 or MATH 1621. Course Attributes: Mathematics & Statistics.

STAT 2561 - Statistics for Professionals 2

3 Credits

Review of inferential statistics; categorical data analysis (including goodness-of-fit tests and contingency table analysis); simple linear regression and correlation; multiple regression analysis; analysis of variance; analysis of covariance; statistical study designs. Formerly STAT 256. Offered fall and spring semesters. Prerequisite(s): STAT 1561 Minimum Grade of C or STAT 2501 Minimum Grade of C or PSYC 2401 Minimum Grade of C. Course Attributes: Mathematics & Statistics, Scientific and Quantitative Literacy.

STAT 2901 - Special Topics in Statistics

1 to 3 Credits

Formerly STAT 290. Prerequisite(s): STAT 2561 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

STAT 2911 - Special Topics in Statistics

1 to 3 Credits

Formerly STAT 290. Prerequisite(s): STAT 2561 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

STAT 2921 - Special Topics in Statistics

1 to 3 Credits

Formerly STAT 290. Course Attributes: Requires Instructor Approval.

STAT 2931 - Special Topics in Statistics

1 to 3 Credits

Formerly STAT 290. Course Attributes: Requires Instructor Approval.

STAT 2971 - Independent Study in Statistics

1 to 3 Credits

Individual study of a topic of particular interest to a student in statistics. This course may be repeated as topics vary. Must be enrolled in one of the following Classifications: Freshman, Sophomore. This course may be repeated 5 times. Course Attributes: Requires Instructor Approval.

STAT 3051 - Tutorial in Actuarial Statistics

1 to 3 Credits

Problem solving course to prepare students for the actuarial examinations. Topics corresponding to these examinations (probability, financial mathematics, statistical modeling, and risk management) will be offered in different semesters. Must be enrolled in one of the following Major fields of study: Mathematical Statistics, Statistics. This course is repeatable for a total of 6 hours.

STAT 3501 - Applied Regression and Correlation Analysis

3 Credits

Simple linear regression and correlation data analysis methods; multiple regression methods; analysis of variance; analysis of covariance; statistical study designs. Formerly STAT 281. Offered fall semester. Prerequisite(s): STAT 2561 Minimum Grade of C or STAT 1761 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

STAT 3511 - Categorical Data Analysis

3 Credits

Statistical inference with regard to categorical variables, including goodness-of-fit tests, contingency table analysis, Fisher exact test, and logistic regression models. Formerly STAT 351. Offered alternate spring semesters. Prerequisite(s): STAT 2561 Minimum Grade of C or STAT 1761 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

STAT 3521 - Analysis of Variance w/ Experimental Design

3 Credits

Single factor analysis of variance, multiple comparisons, two and multiple factor analysis of variance, completely randomized designs, randomized block designs, analysis of covariance, random effects models, additional experimental designs. Formerly STAT 352. Offered alternate spring semesters. Prerequisite(s): STAT 2561 Minimum Grade of C or STAT 1761 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

STAT 3531 - Survey Sampling Methods*3 Credits*

Statistical methods pertaining to survey sampling, with an emphasis on human populations, including simple random sampling, stratified sampling, cluster sampling, systematic sampling, and the use of demographic information to reduce margins of error. Formerly STAT 353. Offered alternate spring semesters. Prerequisite(s): STAT 2561 Minimum Grade of C or STAT 1761 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

STAT 3541 - Nonparametric Statistical Methods*3 Credits*

Review of parametric inferential methods; nonparametric hypothesis testing (including Wilcoxon rank-sum, Wilcoxon signed-rank, sign, Kruskal-Wallis, Friedman); nonparametric point and confidence interval estimation; rank correlation; randomization and permutation tests. Formerly STAT 354. Prerequisite(s): STAT 2561 Minimum Grade of C or STAT 1761 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

STAT 3551 - Applied Probability*3 Credits*

Combinatorial analysis; discrete probability distributions; exponential distribution; Poisson distribution; normal distribution; DeMoivre-LaPlace limit theorem; random variables and their properties; laws of large numbers; generating functions; random walk and ruin problems; Markov chains. Formerly STAT 355. Prerequisite(s): STAT 1561 Minimum Grade of C or STAT 2501 Minimum Grade of C or (MATH 4651 Minimum Grade of C and MATH 1461 Minimum Grade of C) or MATH 1621 Minimum Grade of C or MATH 1631 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

STAT 3571 - Data Management and Statistical Computing*3 Credits*

Use of statistical software packages such as SAS, SPSS, or Excel. Topics include data management, data analysis, graphical displays and computer simulation. Formerly STAT 350. Prerequisite(s): STAT 1761 Minimum Grade of C or STAT 2561 Minimum Grade of C. Course Attributes: Mathematics & Statistics.

STAT 3801 - Tutorial-Actuarial Statistics*1 to 3 Credits*

Problem solving course to prepare students for the actuarial examinations. Topics corresponding to these examinations (probability, financial mathematics, statistical modeling, and risk management) will be offered in different semesters. Must be enrolled in one of the following Major fields of study: Mathematical Statistics, Statistics. This course is repeatable for a total of 6 hours.

STAT 3901 - Special Topics in Statistics*1 to 3 Credits*

Formerly STAT 390. Prerequisite(s): STAT 2561 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

STAT 3911 - Special Topics in Statistics*1 to 3 Credits*

Formerly STAT 390. Prerequisite(s): STAT 2561 Minimum Grade of C. Course Attributes: Requires Instructor Approval.

STAT 3921 - Special Topics in Statistics*1 to 3 Credits*

Formerly STAT 390. Course Attributes: Requires Instructor Approval.

STAT 3931 - Special Topics in Statistics*1 to 3 Credits*

Formerly STAT 390. Course Attributes: Requires Instructor Approval.

STAT 4561 - Introduction to Stochastic Processes*3 Credits*

Random variables and stochastic processes; Markov chains and their properties (discrete and continuous); other important stochastic processes and their properties; elementary stochastic calculus. Formerly STAT 356. Prerequisite(s): (STAT 2501 Minimum Grade of C or MATH 4651 Minimum Grade of C) and (MATH 2651 Minimum Grade of C or MATH 3261 Minimum Grade of C). Course Attributes: Mathematics & Statistics.

STAT 4571 - Linear Statistical Models*3 Credits*

Review of linear algebra; linear statistical models, including regression and analysis of variance models, from a vector space perspective; Bivariate and multivariate normal distributions. Prerequisite(s): (STAT 1561 Minimum Grade of C or STAT 2501 Minimum Grade of C or MATH 4661 Minimum Grade of C) and (MATH 3061 Minimum Grade of C or MATH 2651 Minimum Grade of C). Course Attributes: Mathematics & Statistics.

STAT 4901 - Special Topics in Statistics*1 to 3 Credits*

Formerly STAT 490. Course Attributes: Requires Instructor Approval.

STAT 4911 - Special Topics in Statistics*1 to 3 Credits*

Formerly STAT 490. Course Attributes: Requires Instructor Approval.

STAT 4921 - Special Topics in Statistics*1 to 3 Credits*

Formerly STAT 490. Course Attributes: Requires Instructor Approval.

STAT 4931 - Special Topics in Statistics*1 to 3 Credits*

Formerly STAT 490. Course Attributes: Requires Instructor Approval.

STAT 4971 - Independent Study*1 to 4 Credits Grading mode is S/U*

This course may be repeated 2 times.

DEPARTMENT OF MODERN LANGUAGES

Professors Dufault, T. Finn, Walter; **Associate Professor** Sen (*Chair*); **Instructor** Poelzler-Kamatali, **Lecturer** Umar, Sulayman

Mission Statement

The mission of the Department of Modern Languages is to provide students with abundant opportunities to learn to speak, understand, read, and write languages other than their own and to advance communication with different cultures through study of their literature and art, history, and experiences of themselves as a part of humanity. To this end, our instructors incorporate innovative technology and teaching methods that enhance interpersonal communication skills while promoting in-depth knowledge of the diverse peoples of our global community.

Statement of Purpose

Language study is an indispensable step toward understanding our world's complexity and constitutes an irreplaceable part of a humanities education. It offers opportunities and perspectives unavailable to those limited to one language while providing a basis for mutual knowledge and respect among individuals and nations. Language study builds skills essential to successfully facilitating a multitude of human interactions graduates will encounter in every field of study and professional life.

Accreditation

The foreign language teaching licensure programs in French, German and Spanish are approved by the state of Ohio. The Teacher Education Program is accredited by the National Council for Accreditation of Teacher Education (NCATE).

Majors, Minors and Degrees Offered

French Major (BA)
 German Major (BA)
 Spanish Major (BA)
 French Minor
 German Minor
 Spanish Minor

Licensure Offered

Multi-age (PK-12) Foreign Language: French Licensure
 Multi-age (PK-12) Foreign Language: German Licensure
 Multi-age (PK-12) Foreign Language: Spanish Licensure

Admission Requirements

Students pursuing teacher licensure must request acceptance into the Center for Teacher Education. For specific requirements, refer to the ONU Department of Education.

Special Programs

Study Abroad

As a member of several study-abroad organizations, Ohio Northern University offers students the opportunity to study and complete internships in a large number of countries in Europe, Latin America, Africa, and Asia. While abroad for a summer, one, or two semesters, students earn ONU credit and greatly enhance their linguistic and cultural expertise. These programs are a basis for the capstone experience required of all Modern Languages majors.

Fulfillment of BA Degree Requirements

Students pursuing a BA must demonstrate at least first-year proficiency in a foreign language. To do so, students must pass at least an Elementary 2 modern language course. However, all students, regardless of major or degree requirements, are eligible for retroactive credits for all modern languages courses below the level of the first course satisfactorily completed at ONU. (See chart below.) To determine entry into the appropriate course level, students may complete a placement test and consult with faculty in the modern languages department. The department strongly recommends that students begin foreign language study during their first year.

Retroactive Credit Chart

Courses taken	Credit hours	Start here and earn at least a 'C'
1011 Elementary 1	3	Receive credit for this course
1021 Elementary 2	3	Receive credit for this course, plus 3 more hours (for 1011)
2011 Intermediate 1	3	Receive credit for this course, plus 6 more hours (for 1011 and 1021)
2021 Intermediate 2	3	Receive credit for this course, plus 9 more hours (for 1011, 1021, and 2011)
3011 or 3021 Advanced	3	Receive credit for this course, plus 12 more hours (for 1011, 1021, 2011, and 2021)

Major Course Requirements

Students are encouraged to take a placement test and enroll at the level at which they feel comfortable. Retroactive placement credit will be awarded for 1000- or 2000-level courses upon successful completion of coursework at a higher level. All required courses in the major subject area must be completed with a grade of 'C' or higher. Courses taken through study abroad may be substituted with departmental approval.

French Major (37 credit hours)

FREN 1011 Elementary French 1 (3)
FREN 1021 Elementary French 2 (3)
FREN 2011 Intermediate French 1 (3)
FREN 2021 Intermediate French 2 (3)
FREN 3011 Introduction to French Literature (3)
FREN 3021 Advanced: French Speaking (3)
FREN 3031 Advanced: French Writing (3)
FREN 4501 Capstone (1)

Select five courses (15 credit hours):

FREN 3041 Cultural History of France 1 (3)
FREN 3051 Cultural History of France 2 (3)
FREN 3061 Francophone Cultures (3)
FREN 4001 Special Topics (3)
FREN 4011 French Novel 1 (3)
FREN 4021 French Novel 2 (3)
FREN 4031 French Theatre (3)
FREN 4101 French Poetry and Song (3)
FREN 4201 French Film (3)
FREN 4301 Francophone Literature (3)
FREN 4401 Modern French Musical (3)

French Major with Teacher Licensure (87 credit hours) The 87 credit hours includes the 37 credit hours required for the major plus the 50 additional credit hours required for the licensure. Study abroad is required. See the ONU Department of Education for details about this licensure.

Complete three (3) three-credit French electives (FREN) at the 3000- or 4000-level (9 credits).

Required education courses

EDUC 1151 Culture and Schooling (3) (20 hours field)
EDUC 2101 Exceptional Learners (3) (20 hours field)
EDUC 2681 Curriculum and Assessment (3) (20 hours field)
EDUC 3201 Instructional Media and Educational Technologies (3)
EDUC 3451 Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4401 Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4451 Leadership Seminar in Education (2)
EDUC 4561 Integrated Modern Languages Methods (3) (20 hours field)
EDUC 4741 Student Teaching/MA (12)

Required general education courses

CAMS 1311 Communication in the Classroom (3)
PSYC 2171 Adolescent Psychology (3)

German Major (34 credit hours)

GERM 1011 Elementary German 1 (3)
GERM 1021 Elementary German 2 (3)
GERM 2011 Intermediate German 1 (3)
GERM 2021 Intermediate German 2 (3)
GERM 3011 German Language Studies (3)
GERM 3021 Using German (3)
GERM 3111 Culture of German-Speaking Europe (3)
GERM 3121 Studies in German Literature (3)
GERM 4501 Capstone (1)
OVRC xxxx Study Abroad (9)

German Major with Teacher Licensure (84 credit hours) The 84 credit hours includes the 34 credit hours required for the major plus the 50 additional credit hours required for the licensure. See the Department of Education for details about this licensure.

Complete three (3) three-credit German electives (GERM) at the 3000- or 4000-level (9 credits).

Required education courses

EDUC 1151 Culture and Schooling (3) (20 hours field)
EDUC 2101 Exceptional Learners (3) (20 hours field)
EDUC 2681 Curriculum and Assessment (3) (20 hours field)
EDUC 3201 Instructional Media and Educational Technologies (3)
EDUC 3451 Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4401 Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4451 Leadership Seminar in Education (2)
EDUC 4561 Integrated Modern Languages Methods (3) (20 hours field)
EDUC 4741 Student Teaching/MA (12)

Required general education courses

CAMS 1311 Communication in the Classroom (3)
PSYC 2171 Adolescent Psychology (3)

Spanish Major (37 credit hours)

SPAN 1011 Elementary Spanish 1 (3)
SPAN 1021 Elementary Spanish 2 (3)
SPAN 2011 Intermediate Spanish 1 (3)
SPAN 2021 Intermediate Spanish 2 (3)
SPAN 3011 Spanish Conversation (3)
SPAN 3021 Spanish Composition (3)
SPAN 3041 Introduction to Literature in Spanish (3)
SPAN 4501 Capstone (1)

Select five courses (15 credit hours):

- SPAN 3101 Spanish Film (3)
- SPAN 3111 Spanish Civilization (3)
- SPAN 3121 Spanish Art, Music, Dance (3)
- SPAN 3201 Latin American Film (3)
- SPAN 3211 Latin American Civilization (3)
- SPAN 3221 Latin American Art, Music, Dance (3)
- SPAN 3301 Business Spanish (3)
- SPAN 3311 Contemporary Hispanic Cultural Perspectives (3)
- SPAN 4001 Special Topics (3)
- SPAN 4111 Medieval and Golden Age Spanish Literature (3)
- SPAN 4121 18th and 19th Century Spanish Literature (3)
- SPAN 4131 20th and 21st Century Spanish Literature (3)
- SPAN 4211 Colonial and 19th Century Latin American Literature (3)
- SPAN 4221 20th and 21st Century Latin American Literature (3)

Spanish Major with Teacher Licensure (87 credit hours) The 87 credit hours includes the 37 credit hours required for the major plus the 50 additional credit hours required for the licensure. Study abroad is required. See the ONU Department of Education for details about this licensure.

Complete three (3) three-credit Spanish electives (SPAN) at the 3000- or 4000-level (9 credits).

Required education courses

- EDUC 1151 Culture and Schooling (3) (20 hours field)
- EDUC 2101 Exceptional Learners (3) (20 hours field)
- EDUC 2681 Curriculum and Assessment (3) (20 hours field)
- EDUC 3201 Instructional Media and Educational Technologies (3)
- EDUC 3451 Literacy Across the Content Areas AYA/MA (3) (20 hours field)
- EDUC 4401 Educational Psychology and Instructional Practices (3) (20 hours field)
- EDUC 4451 Leadership Seminar in Education (2)
- EDUC 4561 Integrated Modern Languages Methods (3) (20 hours field)
- EDUC 4741 Student Teaching/MA (12)

Required general education courses

- CAMS 1311 Communication in the Classroom (3)
- PSYC 2171 Adolescent Psychology (3)

Minor Course Requirements

Students are encouraged to take a placement test and enroll at the level at which they feel comfortable. Retroactive placement credit will be awarded for 1001- or 2001-level courses upon successful completion of coursework at a higher level. All required courses in the minor subject area must be completed with a grade of 'C' or higher. Courses taken through study abroad may be substituted with departmental approval.

French Minor (24 credit hours)

- FREN 1011 Elementary French 1 (3)
- FREN 1021 Elementary French 2 (3)
- FREN 2011 Intermediate French 1 (3)
- FREN 2021 Intermediate French 2 (3)
- FREN 3011 Introduction to French Literature (3)
- FREN 3021 Advanced: French Speaking (3)
- FREN 3031 Advanced: French Writing (3)
- FREN 3xx1 French elective (3)

German Minor (21 credit hours)

- GERM 1011 Elementary German 1 (3)
- GERM 1021 Elementary German 2 (3)
- GERM 2011 Intermediate German 1 (3)
- GERM 2021 Intermediate German 2 (3)
- GERM 3011 German Language Studies (3)
- GERM 3021 Using German (3)
- GERM 3111 Culture of German-Speaking Europe (3)
or
- GERM 3121 Studies in German Literature (3)

Spanish Minor (24 credit hours)

- SPAN 1011 Elementary Spanish 1 (3)
- SPAN 1021 Elementary Spanish 2 (3)
- SPAN 2011 Intermediate Spanish 1 (3)
- SPAN 2021 Intermediate Spanish 2 (3)
- SPAN 3011 Spanish Conversation (3)
- SPAN 3021 Spanish Composition (3)
- SPAN 3xx1 Spanish elective (3)
- SPAN 3xx1 Spanish elective (3)

Subject - Arabic (ARAB)

ARAB 1011 - Elementary Arabic 1

3 Credits

This course assumes no previous study of Arabic. The course will introduce the alphabet and sound system of Arabic and will assist in developing some basic reading, writing, speaking and listening skills. The course will deal mainly with Modern Standard Arabic which is the formal language spoken in the Arab world. Some dialectal variations of Arabic will also be introduced when necessary. Course Attributes: Foreign Language, Non Western Cultural, Diversity-Human Interaction.

ARAB 1021 - Elementary Arabic 2

3 Credits

This course will reinforce material learned and practiced in Elementary Arabic 1 and help promote development of Arabic language abilities. This course will devote special attention to Arabic grammar and vocabulary to assist with developing an intermediate level of language accuracy. The course will deal mainly with Modern Standard Arabic, which is the formal language spoken in the Arab world. Some direct attention will be given to the different Arab dialects. Prerequisite(s): ARAB 1011. Course Attributes: Foreign Language, Non Western Cultural.

ARAB 2011 - Intermediate Arabic 1

3 Credits

Continued development of Arabic language skills. Prerequisite(s): ARAB 1021 Minimum Grade of C. Course Attributes: Foreign Language.

ARAB 2021 - Intermediate Arabic 2

3 Credits

Continuation of ARAB 2011. Prerequisite(s): ARAB 2011 Minimum Grade of C. Course Attributes: Foreign Language.

Subject - Chinese (CHNS)

CHIN 1011 - Elementary Chinese 1

3 Credits

Introduction to basic conversational Mandarin, familiarity with the foundations of the Chinese writing system. Course Attributes: Foreign Language, Non Western Cultural.

CHIN 1021 - Elementary Chinese 2

3 Credits

Continuation of CHIN 1011. Prerequisite(s): CHIN 1011 or CHNS 101. Course Attributes: Foreign Language, Non Western Cultural.

CHIN 2011 - Intermediate Chinese 1

3 Credits

Further building of listening and speaking skills. Continued addition of traditional and simplified characters, reading and composition practice. Prerequisite(s): CHIN 1021 or CHNS 103. Course Attributes: Foreign Language, Non Western Cultural.

CHIN 2021 - Intermediate Chinese 2

3 Credits

Continuation of CHIN 2011. Prerequisite(s): CHIN 2011 or CHNS 201. Course Attributes: Foreign Language, Non Western Cultural.

Subject - French (FREN)

FREN 1011 - Elementary French 1

3 Credits

Basic proficiency in understanding, speaking, reading and writing French in everyday situations. Emphasis on comprehension and oral expression. Digitized and Internet realia illustrate contemporary French and francophone cultural values. Course Attributes: Foreign Language, Diversity-Human Interaction.

FREN 1021 - Elementary French 2

3 Credits

Continuation of FREN 1021. Prerequisite(s): FREN 1011 Minimum Grade of C or FREN 120 Minimum Grade of C or French BYU 200. Course Attributes: Foreign Language, Informed Ethical Responses.

FREN 2011 - Intermediate French 1

3 Credits

Continued development of proficiency in understanding, speaking, reading and writing French. Emphasis on high-frequency vocabulary and grammatical structures. Increased exposure to and discussion of contemporary French and francophone cultural values. Prerequisite(s): FREN 1021 Minimum Grade of C or FREN 122 Minimum Grade of C or French BYU 250. Course Attributes: Foreign Language, Diversity-Human Interaction.

FREN 2021 - Intermediate French 2

3 Credits

Continuation of FREN 2021. Prerequisite(s): FREN 2011 Minimum Grade of C or FREN 214 Minimum Grade of C or French BYU 350. Course Attributes: Foreign Language, Informed Ethical Responses.

FREN 3011 - Introduction to French Literature

3 Credits

Basic principles of analyzing and appreciating major works in French, poetry, prose and theater. Reading, discussion of, and written reflection on representative French and francophone texts. Prerequisite(s): FREN 2021 Minimum Grade of C or FREN 216 Minimum Grade of C or French BYU 400. Course Attributes: Foreign Language, Humanities, Informed Responses-Aesthetics.

FREN 3021 - Advanced French: Speaking

3 Credits

Intensive practice of oral communication in conversations, role-playing, and oral interviews within French and francophone cultural contexts. Emphasis on developing fluidity and accurate pronunciation. Prerequisite(s): FREN 2021 Minimum Grade of C or FREN 216 Minimum Grade of C or French BYU 400. Course Attributes: Foreign Language, Diversity-Human Interaction.

FREN 3031 - Advanced French: Writing

3 Credits

Intensive practice of writing in various contexts, such as correspondence, research, and creative narrative. Topics based on French-speaking societies and cultures. Prerequisite(s): FREN 2021 Minimum Grade of C or FREN 216 Minimum Grade of C. Course Attributes: Foreign Language, Critical and Creative Thinking, Integration Across Disciplines.

FREN 3041 - Cultural History of France 1

3 Credits

Discussion in French of French history, art, architecture, and cultural institutions from their origins to the Fifth Republic. Prerequisite(s): (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Ethical Responses.

FREN 3051 - Cultural History of France 2

3 Credits

Discussion in French of French culture with emphasis on the family, education, employment, politics, technology and cultural institutions from the Fifth Republic to the present. Prerequisite(s): (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Ethical Responses.

FREN 3061 - Francophone Cultures

3 Credits

Discussion in French of francophone cultures, including Quebec, the Caribbean, the Maghreb, and sub-Saharan Africa, in terms of historical perspectives and contemporary concerns. Prerequisite(s): (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Non Western Cultural, Diversity-Human Interaction, Informed Ethical Responses.

FREN 4001 - Special Topics

3 Credits

May be repeated as topic varies. Prerequisite(s): (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Unlimited repeats permitted. Course Attributes: Foreign Language.

FREN 4011 - French Novel 1

3 Credits

Reading, discussion of, and written reflection on representative French novels in their historical and cultural contexts from the 16th century to the Revolution. Prerequisite(s): (FREN 3011 Minimum Grade of C or FREN 310 Minimum Grade of C) and (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

FREN 4021 - French Novel 2

3 Credits

Reading, discussion of, and written reflection on representative French and francophone novels in their historical and cultural contexts from the Revolution through the 21st century. Prerequisite(s): (FREN 3011 Minimum Grade of C or FREN 310 Minimum Grade of C) and (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

FREN 4031 - French Theatre

3 Credits

Reading and discussion in French of representative works from the 17th century to the present. Prerequisite(s): (FREN 3011 Minimum Grade of C or FREN 310 Minimum Grade of C) and (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Responses-Aesthetics.

FREN 4101 - French Poetry and Song

3 Credits

Discussion and analysis in French of representative French and francophone works in their historical and cultural contexts. Rules of French versification. Interpretations of poetry into song. Classic and contemporary 'chansonniers.' Prerequisite(s): (FREN 3011 Minimum Grade of C or FREN 310 Minimum Grade of C) and (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Responses-Aesthetics.

FREN 4201 - French Film

3 Credits

Viewing, discussion, and analysis in French of representative French and francophone films, directors, and actors. Prerequisite(s): (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Responses-Aesthetics.

FREN 4301 - Francophone Literature

3 Credits

Reading and discussion in French of works by contemporary writers in francophone countries including Quebec, the Caribbean, the Maghreb, and sub-Saharan Africa. Prerequisite(s): (FREN 3011 Minimum Grade of C or FREN 310 Minimum Grade of C) and (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3031 Minimum Grade of C or FREN 312 Minimum Grade of C). Course Attributes: Foreign Language, Non Western Cultural, Diversity-Human Interaction, Informed Ethical Responses.

FREN 4401 - Modern French Musical*3 Credits*

Oral and written analysis of visual, auditory, and lyrical elements of musical theatre as text. Opportunities to enrich and enhance literary analytical skills in a multimedia environment while improving linguistic competencies and cultural knowledge. Prerequisite(s): (FREN 3011 Minimum Grade of C or FREN 310 Minimum Grade of C) and (FREN 3021 Minimum Grade of C or FREN 311 Minimum Grade of C) and (FREN 3021 Minimum Grade of C or FREN 312 Minimum Grade of C). Unlimited repeats permitted. Course Attributes: Foreign Language, Informed Responses-Aesthetics, Integration Across Disciplines.

FREN 4501 - Capstone*1 Credit*

Written or other presentational record of study abroad experience. Alternative: extensive research paper in French, evaluated by department faculty. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

FREN 4901 - Independent Study in French*1 to 3 Credits*

For advanced students only. This course is repeatable for a total of 3 hours. Course Attributes: Requires Department Approval.

Subject - German (GRMN)**GERM 1011 - Elementary German 1***3 Credits*

For beginners, introduction to basic characteristics of German. Builds on a foundation of vocabulary acquisition through listening and reading comprehension. Basic elements of speaking. Use of texts, stories, audio/visual materials. Course Attributes: Foreign Language.

GERM 1021 - Elementary German 2*3 Credits*

Continuation of GERM 1011. Prerequisite(s): GERM 1011 or GRMN 130 or German BYU 200. Course Attributes: Foreign Language.

GERM 2011 - Intermediate German 1*3 Credits*

Vocabulary building through listening and reading. Greater focus on writing and speaking practice with attention paid to high-frequency grammatical elements. Use of texts, stories, video and audio materials. Prerequisite(s): GERM 1021 or GRMN 132 or German BYU 250. Course Attributes: Foreign Language, Diversity-Human Interaction.

GERM 2021 - Intermediate German 2*3 Credits*

Continuation of GERM 2011. Prerequisite(s): GERM 2011 or GRMN 224 or German BYU 350. Course Attributes: Foreign Language, Diversity-Human Interaction.

GERM 3011 - German Language Studies*3 Credits*

Intensive overview of German grammatical structures. Emphasis on reading of more complex texts; vocabulary acquisition; training in composition. Prerequisite(s): GERM 2021 Minimum Grade of C or GRMN 226 Minimum Grade of C or German BYU 400. Course Attributes: Foreign Language.

GERM 3021 - Using German*3 Credits*

Intensive practice of listening, reading and speaking skills. Some writing. Use of authentic materials. Prerequisite(s): GERM 2021 Minimum Grade of C or GRMN 226 Minimum Grade of C or German BYU 400. Course Attributes: Foreign Language.

GERM 3111 - Culture of German-Speaking Europe*3 Credits*

A look at the roles played by political, social and cultural forces in Germany, Austria and Switzerland from the Middle Ages until the present. Readings and discussion in German, written composition. Prerequisite(s): (GERM 3011 Minimum Grade of C or GRMN 313 Minimum Grade of C) and (GERM 3021 Minimum Grade of C or GRMN 311 Minimum Grade of C). Course Attributes: Foreign Language.

GERM 3121 - Studies in German Literature*3 Credits*

Readings and discussion in German of drama, poetry short stories and the Novelle from the 19th century to the present. Prerequisite(s): (GERM 3011 Minimum Grade of C or GRMN 313 Minimum Grade of C) and (GERM 3021 Minimum Grade of C or GRMN 311 Minimum Grade of C). Course Attributes: Foreign Language, Humanities.

GERM 4501 - Capstone*1 Credit*

Written or other presentational record of study abroad experience. Alternative: extensive research paper in German, evaluated by department faculty. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

GERM 4901 - Independent Study in German*1 to 3 Credits*

For advanced students only. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Japanese (JAPN)**JAPN 1011 - Elementary Japanese 1***3 Credits*

For beginners. Basic listening and speaking skills; introduction to the Japanese writing system. Course Attributes: Foreign Language, Non Western Cultural.

JAPN 1021 - Elementary Japanese 2*3 Credits*

Continuation of JAPN 1011. Prerequisite(s): JAPN 1011 or JAPN 161. Course Attributes: Foreign Language, Non Western Cultural.

JAPN 2011 - Intermediate Japanese 1*3 Credits*

Builds upon basic skills through listening and speaking exercises. Further work with Japanese writing system and development of reading and writing skills. Prerequisite(s): JAPN 1021 or JAPN 163. Course Attributes: Foreign Language, Non Western Cultural.

JAPN 2021 - Intermediate Japanese 2*3 Credits*

Continuation of JAPN 2011. Prerequisite(s): JAPN 2011 or JAPN 264. Course Attributes: Foreign Language, Non Western Cultural.

Subject - Modern Languages (MLNG)**MLNG 1901 - Individualized Language Study***1 to 3 Credits Grading mode is S/U*

Study of a modern spoken language other than those regularly offered. Limited to motivated students with a particular interest or need. Offerings depend on instructor availability. Does not meet any requirements. This course is repeatable for a total of 3 hours. Course Attributes: Requires Department Approval.

Subject - Russian (RUSS)**RUSS 1011 - Elementary Russian 1***3 Credits*

For beginners, introduction to basic characteristics of Russian and the Cyrillic alphabet. Builds foundation of listening and reading comprehension. Use of texts, stories, audio/visual materials. Offered alternate fall semesters. Course Attributes: Foreign Language.

RUSS 1021 - Elementary Russian 2*3 Credits*

Continuation of RUSS 1011. Offered alternate spring semesters. Prerequisite(s): RUSS 1011 or RUSS 150. Course Attributes: Foreign Language.

RUSS 2901 - Independent Study in Russian*1 to 3 Credits*

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Spanish (SPAN)

SPAN 1011 - Elementary Spanish 1

3 Credits

Basic proficiency in understanding, speaking, reading and writing Spanish with emphasis on listening, speaking, and pronunciation. Designed for students who have no previous exposure to the language. Verbal and written expression is limited to short, culturally appropriate communication. Students will acquire a panoramic knowledge of the regions and societies where Spanish is spoken and learn about Spanish-speaking communities in the United States. Course Attributes: Foreign Language.

SPAN 1021 - Elementary Spanish 2

3 Credits

Continuation of SPAN 1011. Prerequisite(s): SPAN 1011 or SPAN 140 or Spanish BYU 200. Course Attributes: Foreign Language.

SPAN 2011 - Intermediate Spanish 1

3 Credits

Continued development of proficiency in understanding, speaking, reading and writing Spanish with emphasis on pronunciation and speaking. Designed for students who have completed the Elementary level or have previous exposure to Spanish. Acquisition of language skills and practice identifying ideas in written texts. Written expression with more incorporation of vocabulary as well as grammar structures compared to the Elementary level. Prerequisite(s): SPAN 1021 or SPAN 142 or Spanish BYU 250. Course Attributes: Foreign Language, Diversity-Human Interaction.

SPAN 2021 - Intermediate Spanish 2

3 Credits

Continuation of SPAN 2011. Offered spring semester. Prerequisite(s): SPAN 2011 or SPAN 244 or Spanish BYU 350. Course Attributes: Foreign Language, Diversity-Human Interaction.

SPAN 3011 - Spanish Conversation

3 Credits

Strengthening Spanish communication skills by regular guided oral practice. Building vocabulary, written exercises, and improving comprehension by listening to live speech, videos, audio recordings, and films. Prerequisite(s): SPAN 2021 Minimum Grade of C or SPAN 246 Minimum Grade of C or Spanish BYU 400. Course Attributes: Foreign Language, Effective Communication Non-Writing.

SPAN 3021 - Spanish Composition

3 Credits

Improvement of written communication skills. Emphasis on task-oriented writing in Spanish, including composing and editing several drafts. Topics based on Spanish speaking societies and cultures. Prerequisite(s): SPAN 2021 Minimum Grade of C or SPAN 246 Minimum Grade of C or Spanish BYU 400. Course Attributes: Foreign Language, Critical and Creative Thinking, Integration Across Disciplines.

SPAN 3041 - Introduction to Spanish Literature

3 Credits

Discussion in Spanish of critical principles in the assessment of prose, fiction, poetry and drama as applied to selected readings in Spanish and Latin American literature. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Concurrency allowed. Course Attributes: Foreign Language, Humanities, Informed Responses-Aesthetics.

SPAN 3101 - Spanish Film

3 Credits

Discussion in Spanish of historical development of Spanish cinema through significant directors, such as Buñuel, Saura, Almodóvar. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Concurrency allowed. Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 3111 - Spanish Civilization

3 Credits

Discussion in Spanish of geographical, political, economic, social and cultural forces in Spain from prehistoric times to the present. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Concurrency allowed. Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Ethical Responses.

SPAN 3121 - Spanish Art, Music, Dance

3 Credits

Discussion in Spanish of Spanish art, architecture, music and dance from prehistoric times to the present. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Concurrency allowed. Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 3201 - Latin American Film

3 Credits

Viewing and analysis in Spanish of contemporary Latin American film, with emphasis on understanding the film industry and how films relate to social and political contexts. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Concurrency allowed. Course Attributes: Foreign Language, Non Western Cultural, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 3211 - Latin American Civilization

3 Credits

Discussion in Spanish of geography, history and culture of Latin America from Mesoamerica to the present. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Concurrency allowed. Course Attributes: Foreign Language, Non Western Cultural, Diversity-Human Interaction, Informed Ethical Responses.

SPAN 3221 - Latin American Art, Music, Dance

3 Credits

Discussion in Spanish of Latin American art, architecture, music and dance from Mesoamerica to the present. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Course Attributes: Foreign Language, Non Western Cultural, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 3301 - Business Spanish

3 Credits

Development of oral and written proficiency of Spanish within a business context. Business vocabulary, readings, business and cultural concepts, situational practice and case studies. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Course Attributes: Foreign Language, Diversity-Human Interaction, Informed Ethical Responses.

SPAN 3311 - Contemporary Hispanic Culture

3 Credits

Comparative study in Spanish of socio-cultural attitudes, popular/folk traditions and lifestyles within Hispanic communities. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Concurrency allowed. Course Attributes: Foreign Language, Non Western Cultural.

SPAN 4001 - Special Topics

3 Credits

May be repeated as topic varies. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Concurrency allowed. Unlimited repeats permitted. Course Attributes: Foreign Language.

SPAN 4111 - Medieval and Golden Age Spanish Literature

3 Credits

Discussion in Spanish of poetry, prose and drama from the origins of the Spanish language to 1681. Works may include selections from the epic of Mio Cid, El libro de buen amor, Don Quijote, Lope de Vega, Quevedo. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Course Attributes: Foreign Language, Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 4121 - 18th and 19th Century Spanish Literature

3 Credits

Discussion in Spanish of principles and works of Neoclassicism, Romanticism, Realism, the Generation of 1898. Works may include Don Juan Tenorio, narrative by Benito Pérez Galdós and Emilia Pardo Bazán, poetry by Antonio Machado. Formerly SPAN 452. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Course Attributes: Foreign Language, Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 4131 - 20th and 21st Century Spanish Literature

3 Credits

Discussion in Spanish of modern poetry from the Generation of 1927, *tremendismo*, the post-Franco reaction, contemporary trends. Works may include selections from Federico García Lorca, Nobel Prize winner Camilo José Cela, Antonio Muñoz Molina. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Course Attributes: Foreign Language, Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 4211 - Colonial and 19th Century Latin American Literature

3 Credits

Reading, discussion, and analysis in Spanish of Romanticism, Realism, and Modernism in representative works by Latin American authors. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Course Attributes: Foreign Language, Non Western Cultural, Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 4221 - 20th and 21st Century Latin American Literature

3 Credits

Reading and discussion in Spanish of works by contemporary writers in Latin American countries. Prerequisite(s): (SPAN 3011 Minimum Grade of C or SPAN 370 Minimum Grade of C) and (SPAN 3021 Minimum Grade of C or SPAN 372 Minimum Grade of C). Course Attributes: Foreign Language, Non Western Cultural, Humanities, Diversity-Human Interaction, Informed Responses-Aesthetics.

SPAN 4501 - Capstone

1 Credit

Written or other presentational record of study abroad experience. Alternative: extensive research paper in Spanish, evaluated by department faculty. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

SPAN 4901 - Independent Study in Spanish

1 to 3 Credits

For advanced students only. This course is repeatable for a total of 3 hours. Course Attributes: Requires Department Approval.

DEPARTMENT OF MUSIC

Professors C. Bates, T. Hunt; **Associate Professors** Ayling, Casey (*Chair*), Kosmyna, S. Waters; **Assistant Professors** Lenzo, H. Schroeder; **Resident Artists** Osbun-Manley; **Music Director/Staff** Juergens; **Lecturers** Aebker, Altstaetter, L. Ashmore, P. Ashmore, Blowers, Damschroder, D'Arca, Eichelberger, Graber, Green, Jordan, Klaas, Laukhuf, Mills, Parker, Pinkney, Roth-Basinger, Simioanca, Smith, Sommer, Torres, Weiler

Mission Statement

In keeping with the university and college mission statements, the Music Department strives to develop the higher values of beauty and goodness through the art of music. The Department of Music seeks to fully develop highly capable music majors to be leaders in tomorrow's cultural landscape—as music educators, performers, scholars and advocates—while actively serving the greater whole of the university's mission by providing its general student body with significant applied and academic opportunities in music.

Accreditation

The Music Department is accredited by the National Association of Schools of Music.

Majors, Minors and Degrees Offered

Music Major

Applied Studies Concentration (BA)

Music History and Literature Concentration (BA)

Music Theory and Composition Concentration (BA)

Music Education Major (BM)

Music Performance Major (BM)

Music Minor

Licensure Offered

Multi-age (PK-12) Music Licensure

Admission Requirements

Auditions are required of all new students (freshman or transfer) who wish to declare a major in music. The audition process also determines scholarship consideration. All audition information is available on the music admissions webpage.

Music Education majors must meet the requirements of the Center for Teacher Education's professional education program for Music (PK-12) licensure.

Special Programs

Study Abroad

Music majors frequently take advantage of study-abroad opportunities offered through the university, including student teaching. A special relationship exists between ONU and the Estonian Academy of Music and with the University of Salford in Manchester, England.

Major Course Requirements

All required courses in major subject area must be completed with a grade of 'C' or higher. All required courses outside of the major subject area must be completed with a grade of 'D' or higher.

Bachelor of Arts: Music Major (49-52 credit hours)

Students pursuing the Bachelor of Arts with a major in music must complete core requirements plus one of these concentrations: applied studies in vocal, instrumental, or piano; music history and literature; or music theory and composition. The 49-52 credit hours listed below include the core courses (29 hours), plus the 20-23 credit hours required for the concentration. An additional 21 hours of elective hours are also required outside of music. An academic minor, such as minor in arts administration offered through the theatre arts department, is strongly encouraged.

Core (29 hours)

MUSC 0011	Concert and Recital Observation (0)
MUSC 1011	Introduction to the Study of Music (2)
MUSC 1021	Technology for Musicians (1)
MUSC 1111	Music Theory I (3)
MUSC 1121	Music Theory II (3)
MUSC 1131	Aural Skills I (1)
MUSC 1141	Aural Skills II (1)
MUSL 1211	Applied Lessons (2)
MUSL 1221	Applied Lessons (2)
MUSL 2211	Applied Lessons (2)
MUSL 2221	Applied Lessons (2)
MUSC 3211	Music History and Literature I (3)
MUSC 3221	Music History and Literature II (3)
MUSE 1011-1251	Major Ensembles (4)

Concentrations:

Applied Studies Concentration (20-21 credit hours)—instrumental

MUSL 2391	2nd Year Applied Proficiency Exam (0)
MUSL 3211	Applied Lessons (2)
MUSL 3221	Applied Lessons (2)
MUSL 4211	Applied Lessons (2)
MUSL 4221	Applied Lessons (2)
MUSC 4291	Applied Field Literature and Pedagogy of Instrumentalists (2)
MUSE XXXX	Ensembles (4)
MUSC XXXX	Electives (3)
MUSL 0011B	Applied lessons for non-majors piano (1 credit)
MUSC 4601	Senior Research Project (3 credits)

Applied Studies Concentration (20 credit hours)–vocal

MUSL 2391	2nd Year Applied Proficiency Exam (0)
MUSL 3211	Applied Lessons (2)
MUSL 3221	Applied Lessons (2)
MUSL 4211	Applied Lessons (2)
MUSL 4221	Applied Lessons (2)
MUSE XXXX	Ensembles (5)
MUSC 1331	Diction for Singers (1)
MUSC 3271	Survey of Vocal Literature I (1)
MUSC 3281	Survey of Vocal Literature II (1)
MUSL 0011B	Piano for non-majors (1)
MUSC 4601	Senior Research Project (3)

Applied Studies Concentration (20 credit hours)–piano

MUSL 2391	2nd Year Applied Proficiency Exam (0)
MUSL 3211	Applied Lessons (2)
MUSL 3221	Applied Lessons (2)
MUSL 4211	Applied Lessons (2)
MUSL 4221	Applied Lessons (2)
MUSE XXXX	Ensembles (2)
MUSC XXXX	Electives (2-3)
MUSC 2341	Survey of Piano Literature (2)
MUSC 2351	Piano Pedagogy (2)
MUSL 2041	Piano Proficiency Exam (0)
MUSC 4601	Senior Research Project (3)

Music History and Literature Concentration (20 credit hours)

MUSC 2111	Music Theory III (3)
MUSC 2131	Aural Skills III (1)
MUSC 3231	Jazz History and Literature (3)
MUSC 2201	Non-Western Music (3)
MUSC 3241	American Music (3)
MUSC 3251	African Music (3)
MUSL 0011B	Piano for non-majors (1)
MUSC 4601	Senior Research Project (3)

Music Theory and Composition Concentration (23 credit hours)

MUSC 2111	Music Theory III (3)
MUSC 2121	Music Theory IV (3)
MUSC 2131	Aural Skills III (1)
MUSC 2141	Aural Skills IV (1)
MUSC 3151	Composition (6)
MUSC 4111	Analytical Techniques (2)
MUSL 1011 & MUSL 1021	Piano Skills for music majors I / Piano Skills for Music Majors II (2)
MUSL 2041	Piano Proficiency Exam (0)
MUSC 4171	Instrumentation and Arranging (2)
MUSC 4601	Senior Research Project (3)

Bachelor of Music: Major in Music Education Major (112 credit hours)

Successful completion of Praxis Core Academic Skills for Educators, or Act composite score of 25 or higher, or SAT-I total of 1130 or higher and a 2.50 GPA are required for study beyond the fourth semester. The Pearson OAE Music Content Assessment and the Piano Proficiency Exam (MUSL 2041) must be passed prior to student teaching. The Pearson OAE Assessment of Professional Knowledge Multi-Age (PK-12) must be passed before being recommended for the teaching license.

MUSC 0011	Concert and Recital Observation (0)
MUSC 1011	Introduction to the Study of Music (2)
MUSC 1021	Technology for Musicians (1)
MUSC 1111	Music Theory I (3)
MUSC 1121	Music Theory II (3)
MUSC 1131	Aural Skills I (1)
MUSC 1141	Aural Skills II (1)
MUSL 2041	Piano Proficiency Exam (0)
MUSC 2111	Music Theory III (3)
MUSC 2121	Music Theory IV (3)
MUSC 2131	Aural Skills III (1)
MUSC 2141	Aural Skills IV (1)
MUSC 2201	Non-Western Music (3)
MUSC 2311	Basic Conducting (2)
MUSL 2391	Second Year Applied Proficiency Exam (0)
MUSC 2401	Foundations of Music Education (1)
MUSC 2411	Woodwind Methods (1)

MUSC 2421	Brass Methods (1)
MUSC 2431	String Methods (1)
MUSC 2441	Percussion Methods (1)
MUSC 3211	Music History and Literature I (3)
MUSC 3221	Music History and Literature II (3)
MUSL 3301	Half Recital (0)
MUSC 3471	Technology for Music Educators (2)
MUSC 4171	Instrumentation and Arranging (2)
MUSC 4481	Instrumental Music Methods (3)
MUSC 4491	Choral Music Methods (3)

Complete 7 credit hours in a major ensemble in the area of applied specialization:

MUSE 1011	University Singers (1) (Vocal majors must audition for this group)
MUSE 1021	Symphony Orchestra (1)
MUSE 1031	Wind Orchestra (1)
MUSE 1041	Symphonic Band (1)
MUSE 1051	Marching Band (1)

Complete 3 credit hours in a minor ensemble:

MUSE 1111	Opera Workshop
MUSE 1131	Chamber Singers
MUSE 1141	A Capella Ensembles
MUSE 1151	Women's Chorus *Counts as major performing group if voice major does not pass University Singers audition
MUSE 1161	Men's Chorus *Counts as major performing group if voice major does not pass University Singers audition
MUSE 1171	Jazz Ensemble
MUSE 1181	Steel Drum Band
MUSE 1191	Brass Ensemble
MUSE 1201	Percussion Ensemble
MUSE 1211	String Ensemble
MUSE 1221	Woodwind Ensemble
MUSE 1241	Composer's Workshop Ensemble
MUSE 1251	Chamber Music

Complete 14 credit hours:

MUSL 1211	Applied Lessons (2)
MUSL 1221	Applied Lessons (2)
MUSL 2211	Applied Lessons (2)
MUSL 2221	Applied Lessons (2)
MUSL 3211	Applied Lessons (2)
MUSL 3221	Applied Lessons (2)
MUSL 4211	Applied Lessons (2)

Complete one:

MUSC 1331	Singer's Diction I (1) (for vocal majors)
MUSL 0401	Voice Class (1) (for instrumental majors)
MUSE 1151	Women's Chorus (1) (for instrumental majors)
MUSE 1161	Men's Chorus (1) (for instrumental majors)

Complete one:

MUSC 3311	Choral Conducting (2) (for vocal majors)
MUSC 3321	Instrumental Conducting (2) (for instrumental majors)

Complete 2 credit hours:

MUSC 3461	Methods of Marching and Jazz Bands (2) (for instrumental majors)
MUSC 2331	Singer's Diction II (1) (for vocal majors)
MUSC 3331	Singer's Diction III (1) (for vocal majors)

Required education courses:

EDUC 1151	Culture and Schooling (3) (20 hours field)
EDUC 2101	Exceptional Learners (3) (20 hours field)
EDUC 2681	Curriculum and Assessment (3) (20 hours field)
EDUC 3451	Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4401	Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4591	Integrated Music Methods (3) (20 hours field)
EDUC 4451	Leadership Seminar in Education (2)
EDUC 4741	Student Teaching MA (Capstone) (12)

Other required courses:

CAMS 1311 Communication in the Classroom (3)
PSYC 2151 Developmental Psychology (3)

Bachelor of Music: Major in Music Performance (86 credit hours)

MUSC 0011 Concert and Recital Attendance (0)
MUSC 1011 Introduction to the Study of Music (2)
MUSC 1021 Technology for Musicians (1)
MUSC 1111 Music Theory I (3)
MUSC 1121 Music Theory II (3)
MUSC 1131 Aural Skills I (1)
MUSC 1141 Aural Skills II (1)
MUSL 2041 Piano Proficiency Exam (0)
MUSC 2111 Music Theory III (3)
MUSC 2121 Music Theory IV (3)
MUSC 2131 Aural Skills III (1)
MUSC 2141 Aural Skills IV (1)
MUSC 2201 Non-Western Music (3)
MUSC 2311 Basic Conducting (2)
MUSL 2391 Second Year Applied Proficiency Exam (0)
MUSC 3211 Music History and Literature I (3)
MUSC 3221 Music History and Literature II (3)
MUSL 3311 Junior Recital (1)
MUSC 4111 Analytical Techniques (2)
MUSC 4171 Instrumentation and Arranging (2)
MUSL 4311 Senior Capstone Recital (1)
MUSC xxx1 Electives (6)
MXXX xxxx Electives (1)

Complete 8 credit hours in a major ensemble in the area of applied specialization:

MUSE 1011 University Singers (1) (Vocal Majors must audition for this group)
MUSE 1021 Symphony Orchestra (1)
MUSE 1031 Wind Orchestra (1)
MUSE 1041 Symphonic Band (1)
MUSE 1051 Marching Band (1)

Complete 2 credit hours in a minor ensemble in the area of applied specialization:

MUSE 1111 Opera Workshop
MUSE 1131 Chamber Singers
MUSE 1141 A Capella Ensembles
MUSE 1151 Women's Chorus *Counts as major performing group if voice major does not pass University Singers audition
MUSE 1161 Men's Chorus *Counts as major performing group if voice major does not pass University Singers audition
MUSE 1171 Jazz Ensemble
MUSE 1181 Steel Drum Band
MUSE 1191 Brass Ensemble
MUSE 1201 Percussion Ensemble
MUSE 1211 String Ensemble
MUSE 1221 Woodwind Ensemble
MUSE 1241 Composer's Workshop Ensemble
MUSE 1251 Chamber Music

Complete 20 credit hours:

MUSL 1211 Applied Lessons (2)
MUSL 1221 Applied Lessons (2)
MUSL 2211 Applied Lessons (2)
MUSL 2221 Applied Lessons (2)
MUSL 3211 Applied Lessons (3)
MUSL 3221 Applied Lessons (3)
MUSL 4211 Applied Lessons (3)
MUSL 4221 Applied Lessons (3)

Complete 3 credit hours from one of the following groups:

MUSC 1331 Singers Diction I (1)
MUSC 2331 Singers Diction II (1)
MUSC 3331 Singers Diction III (1)
or
MUSE 1251 Chamber Music (3)
or
MUSC 2351 Piano Pedagogy (2)
MUSE 1251 Chamber Music (1)

Complete 2 credit hours from one of the following groups:

MUSC 2341 Survey of Piano Literature (2)
or
MUSC 3271 Survey of Vocal Literature I (1)
MUSC 3281 Survey of Vocal Literature II (1)
or
MUSC 4291 Applied Field Literature and Pedagogy for Instrumentalists (2)

Complete one:

MUSC 3311 Choral Conducting (2)
MUSC 3321 Instrumental Conducting (2)

Other required courses:

MLNG xxx1 Modern Language I (3)
MLNG xxx1 Modern Language II (3)

Minor Course Requirements

All courses required for a minor must be completed with a grade of 'C' or higher.

Music Minor (21 credit hours)

Choose one:

Music Appreciation (3)
Introduction to the Study of Music (2)

Then choose from the following to add up to a total of 21:

Music Theory I (3)
Music Theory II (3)
*Aural Skills I (1) *Aural Skills I must also take Theory I
*Aural Skills II (1) *Aural Skills II must also take Theory II
Music History and Lit I (3)
Music History and Lit II (3)
American Music (3)
African Music (3)
Jazz History and Lit (3)
Non-Western Music (3)
Music Technology (1)
Diction I (1)
Choose four credits of MUSE XXXX (4)
Choose two credits MUSL 0011 (2)

Subject - Music (MUSC)

MUSC 0011 - Concert and Recital Observation

0 Credits Grading mode is S/U

Required number of concerts and recitals to be attended each semester, including some events with mandatory attendance. Student must receive credit in six semesters to graduate. Limited to music majors. Offered fall and spring semesters. Unlimited repeats permitted.

MUSC 1001 - Music Appreciation

3 Credits

Music and its basic elements, including culture, forms, styles and media associated with a variety of music. Emphasis on listening and understanding historical periods and respective stylistic characteristics. Includes concert attendance, knowledge of music fundamentals, instruments, composers and representative literature. Not available to music majors. Offered fall and spring semesters. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

MUSC 1011 - Introduction to Study of Music

2 Credits

All aspects of the music major, including the development of a four-year plan for graduation that fulfills NASM competencies and ONU catalog requirements for each degree program. Includes survey of western art music with emphasis on musical terms, styles, composers and representative literature. Limited to music majors and/or minors. Offered fall semester. Must be enrolled in one of the following Fields of Study: Music, Music Education, Music Performance, Musical Theatre. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

MUSC 1021 - Technology for Musicians

1 Credit

The use of technology in the music professions. Emphasis on MIDI sequencing, music notation, and digital audio recording. Limited to music majors and minors. Offered fall and spring semesters.

MUSC 1031 - Fundamentals of Music

3 Credits

Note names, clefs, scales, triads, inversions, intervals, key signatures. Offered summers. Course Attributes: Fine Arts.

MUSC 1041 - Fundamentals of Music for Musical Theatre Majors

3 Credits

Reading and writing musical notation including rhythms, note names, scales, chords, intervals, and interpretation. Offered fall semester. Course Attributes: Fine Arts.

MUSC 1051 - Musicianship for the Musical Theatre

3 Credits

Functional harmony and form analysis applied to musical theatre repertoire. Includes advanced sight-singing and techniques for notating melody and harmony. Offered spring semester. Prerequisite(s): MUSC 1041 Minimum Grade of C. Course Attributes: Fine Arts.

MUSC 1111 - Music Theory I

3 Credits

Foundational music theory and harmony including analysis, part-writing, and creative projects in composition and arranging. Limited to music majors and/or minors. Offered fall semester. Corequisite(s): MUSC 1131. Course Attributes: Fine Arts.

MUSC 1121 - Music Theory II

3 Credits

Continuation of MUSC 1111. Offered spring semester. Prerequisite(s): MUSC 1111 Minimum Grade of C. Corequisite(s): MUSC 1141. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

MUSC 1131 - Aural Skills I

1 Credit

Introduction to sight-singing; melodic, rhythmic, and harmonic dictation; and keyboard skills. Includes basic counting exercises, conducting patterns, and coordination exercises to train basic musicianship skills in a skills/performance-based environment. Offered fall semester. Corequisite(s): MUSC 1111.

MUSC 1141 - Aural Skills II

1 Credit

Continuation of MUSC 1131. Offered spring semester. Prerequisite(s): MUSC 1131 Minimum Grade of C. Corequisite(s): MUSC 1121.

MUSC 1331 - Singers Diction I

1 Credit

The proper pronunciation of vocal and choral texts in Italian and Latin. Introduction of the International Phonetic Alphabet as it applies to all languages. Offered fall semester.

MUSC 1901 - Special Topics

1 to 3 Credits

Topics include, but are not limited to special areas in music theory, music history, and/or music education. May be repeated as topics vary. Offered on demand. Course Attributes: Requires Department Approval.

MUSC 2111 - Music Theory III

3 Credits

Continuation of MUSC 1121. The study of 18th, 19th and 20th century compositional techniques, orchestration and counterpoint. Includes development of analytical skills. Offered fall semester. Prerequisite(s): MUSC 1121 Minimum Grade of C. Corequisite(s): MUSC 2131. Course Attributes: Fine Arts.

MUSC 2121 - Music Theory IV

3 Credits

Continuation of MUSC 2111. Offered spring semester. Prerequisite(s): MUSC 2111 Minimum Grade of C. Corequisite(s): MUSC 2141. Course Attributes: Fine Arts, Scientific and Quantitative Literacy.

MUSC 2131 - Aural Skills III

1 Credit

Continuation of MUSC 1141. Advanced sight-singing; melodic, rhythmic, and harmonic dictation; and keyboard basic skills. Includes advanced counting exercises, conducting patterns, and coordination exercises to train advanced musicianship skills in a skills/performance based environment. Offered fall semester. Prerequisite(s): MUSC 1141 Minimum Grade of C. Corequisite(s): MUSC 2111.

MUSC 2141 - Aural Skills IV

1 Credit

Continuation for MUSC 2131. Offered spring semester. Prerequisite(s): MUSC 2131 Minimum Grade of C. Corequisite(s): MUSC 2121.

MUSC 2201 - Non-Western Music

3 Credits

The fundamental concepts of music in any culture with an in-depth exploration of the music of a limited number of non-Western groups. Emphasis on listening and understanding. Prerequisite(s): MUSC 1121 Minimum Grade of C. Course Attributes: Non Western Cultural, Fine Arts, Diversity-Human Interaction.

MUSC 2311 - Basic Conducting

2 Credits

Basic baton technique applied to choral and instrumental conducting practices. Includes score reading and rehearsal techniques for various ensembles. Offered fall semester. Prerequisite(s): MUSC 1121 Minimum Grade of C and MUSC 1141 Minimum Grade of C. Course Attributes: Effective Communication Non-Writing.

MUSC 2331 - Singers Diction II

1 Credit

Continuation of MUSC 1331, with specialized work in German. Offered alternate spring semesters. Prerequisite(s): MUSC 1331 Minimum Grade of C.

MUSC 2341 - Survey of Piano Literature

2 Credits

Major keyboard composers, including overviews of styles, keyboard music as it relates to music history, and how various styles influenced future composers and keyboard music. Performance practices and recording artists emphasized. Permission of instructor required. Offered alternate fall semesters. Course Attributes: Requires Instructor Approval.

MUSC 2351 - Piano Pedagogy

2 Credits

The role of the teacher in the learning process including observation and laboratory teaching; literature relevant to piano pedagogy and its practical application; presentation of a professional teaching demeanor; basic methods of teaching individual and group piano; technology applicable to the above. Permission of instructor. Offered alternate spring semesters. Course Attributes: Requires Instructor Approval.

MUSC 2401 - Foundations of Music Education

1 Credit

Orientation to the profession of music education, including current issues; psychological, sociological, aesthetic, and historical foundations; current philosophies and learning theories; assessment; and an overview of instructional skills, knowledge, and dispositions, including national and state standards for music education. Limited to music education majors. Offered alternate spring semesters. Prerequisite(s): MUSC 1011 Minimum Grade of C.

MUSC 2411 - Woodwind Methods

1 Credit

Elementary performance skills and pedagogy of woodwind instruments including literature and materials for school-aged performers. Limited to music education majors. Offered alternate spring semesters. Prerequisite(s): MUSC 1121 Minimum Grade of C and MUSC 1141 Minimum Grade of C.

MUSC 2421 - Brass Methods

1 Credit

Elementary performance skills and pedagogy of brass instruments including literature and materials for school-aged performers. Limited to music education majors. Offered alternate fall semesters. Prerequisite(s): MUSC 1121 Minimum Grade of C and MUSC 1141 Minimum Grade of C.

MUSC 2431 - String Methods*1 Credit*

Elementary performance skills and pedagogy of string instruments including literature and materials for school-aged performers. Limited to music education majors. Offered alternate spring semesters. Prerequisite(s): MUSC 1121 Minimum Grade of C and MUSC 1141 Minimum Grade of C.

MUSC 2441 - Percussion Methods*1 Credit*

Elementary performance skills and pedagogy of percussion instruments including literature and materials for school-aged performers. Limited to music education majors. Offered alternate fall semesters. Prerequisite(s): MUSC 1121 Minimum Grade of C and MUSC 1141 Minimum Grade of C.

MUSC 2901 - Special Topics*1 to 3 Credits*

Topics include, but are not limited to special areas in music theory, music history, and/or music education. Permission of department and instructor. May be repeated as topics vary. Offered on demand. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

MUSC 2911 - Independent Study*1 to 3 Credits Grading mode is S/U*

Individual study of a course of interest to, or needed by, a music major. May be repeated as the topic varies. Offered on demand. Must be enrolled in one of the following Fields of Study: Music, Music Education, Performance. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

MUSC 3151 - Composition*2 Credits*

Principles and practices general to all compositional styles applied to weekly composition projects. Includes score study of great works. Limited to music majors. Offered fall and spring semesters. Prerequisite(s): MUSC 2121 Minimum Grade of C and MUSC 2141 Minimum Grade of C. Unlimited repeats permitted.

MUSC 3211 - Music History and Literature I*3 Credits*

Survey of the history of Western music from the medieval, renaissance, and baroque eras. Study of the development of musical styles, genres and compositional devices. Includes score reading and musical analysis. Students will become familiar with the masterworks of Western music history. Limited to music majors and minors. Offered fall semester. Prerequisite(s): MUSC 1121 Minimum Grade of C. Course Attributes: Fine Arts, Effective Communication Non-Writing, Integration Across Disciplines.

MUSC 3221 - Music History and Literature II*3 Credits*

A survey of the history of Western music from the Classical, Romantic, and Modern eras of music. Study of the development of musical styles, genres and compositional devices. Course includes score reading and musical analysis. Students will become familiar with the masterworks of Western music history. Limited to music majors and minors. Offered spring semester. Prerequisite(s): MUSC 1121 Minimum Grade of C. Course Attributes: Fine Arts, Effective Communication Non-Writing, Integration Across Disciplines.

MUSC 3231 - Jazz History and Literature*3 Credits*

Jazz from African influences through present developments; personalities involved in stylistic change. Listening-based; experiential component. Course Attributes: Fine Arts, Informed Ethical Responses, Informed Responses-Aesthetics.

MUSC 3241 - American Music*3 Credits*

Music from colonial America to present day. Listening and recognition of styles and instruments, major composers and performers. Includes sacred music, pop, rock, band, jazz and music from the stage. Course Attributes: Fine Arts.

MUSC 3251 - African Music*3 Credits*

Traditional and modern music from Africa. Includes music from western African and southern African countries as well as the African Diaspora. Listening, recognition of styles and musical instruments, dance, religious ceremonies. Course Attributes: Fine Arts, Diversity-Human Interaction, Informed Responses-Aesthetics.

MUSC 3271 - Survey of Vocal Literature I*1 Credit*

Study of recital vocal literature, focusing on the Lied, French melodie, and British and American art song. Some Russian and Czech literature included. Offered alternate fall semesters. Prerequisite(s): MUSL 2391 Minimum Grade of S.

MUSC 3281 - Survey of Vocal Literature II*1 Credit*

Continuation of MUSC 3271. Offered alternate spring semesters.

MUSC 3311 - Choral Conducting*2 Credits*

Adaption of basic conducting techniques to the choral ensemble including leadership, error detection, tonal development, historical and stylistic accuracy and analysis. Includes survey choral literature and programming for ensembles of every level. Offered alternate spring semesters. Prerequisite(s): MUSC 2311 Minimum Grade of C.

MUSC 3321 - Instrumental Conducting*2 Credits*

Adaption of basic conducting techniques to the instrumental ensemble including formal analysis, score-marking, transpositions, rehearsal technique, error detection, program creation, historical and stylistic accuracy and analysis. Includes survey of literature for concert bands, wind ensembles, string orchestras and symphony orchestras in the schools at every level. Offered alternate spring semesters. Prerequisite(s): MUSC 2311 Minimum Grade of C.

MUSC 3331 - Singers Diction III*1 Credit*

Continued development of the skills acquired in Diction I, with specialized work in French. Offered alternate spring semesters. Prerequisite(s): MUSC 1331 Minimum Grade of C.

MUSC 3461 - Methods of Marching and Jazz Bands*2 Credits*

Methods, materials, and techniques in the development and direction of marching and jazz bands. Marching band topics include show planning, drill writing, precision drill, rehearsal techniques, and selection and rehearsal of music. Membership in Marching Band required in conjunction with the course. Jazz ensemble methods include seating, standard and alternative instrumentation, literature selection and preparation, style, and the development of a personal philosophy of jazz education. This course is not for developing Jazz musicians. Offered every alternate fall semester. Prerequisite(s): MUSC 1121 Minimum Grade of C and MUSC 1141 Minimum Grade of C. Corequisite(s): MUSE 1051.

MUSC 3471 - Technology for Music Educators*2 Credits*

Integration of technology into the music curriculum, effective use of technology in teaching and learning music, preparation of teaching and administrative materials, leading class activities, and student projects. Includes experiences with music notation software, audio amplification, recording and editing, video recording and editing, and website creation and management. Offered alternate fall semester. Prerequisite(s): MUSC 1121 Minimum Grade of C and MUSC 1141 Minimum Grade of C.

MUSC 3901 - Special Topics*1 to 3 Credits*

Topics include, but are not limited to special areas in music theory, music history, and/or music education. Permission of department and instructor. May be repeated as topics vary. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

MUSC 4111 - Analytical Techniques*2 Credits*

Elements of form and analysis, and counterpoint. Musical forms and styles from the Baroque to the present. Theoretical and stylistic analysis of representative music with creative projects in contrapuntal writing. Offered alternate fall semesters. Prerequisite(s): MUSC 2121 Minimum Grade of C and MUSC 2141 Minimum Grade of C.

MUSC 4161 - Electronic Music*2 Credits*

History, development, materials, and techniques of electronic music. Emphasis on composition in the medium. Prerequisite(s): MUSC 1121 Minimum Grade of C and MUSC 1141 Minimum Grade of C. Unlimited repeats permitted.

MUSC 4171 - Instrumentation and Arranging*2 Credits*

Basic characteristics of each orchestral instrument and instrument family, including range, transposition, timbre and technique. Students produce scores of arrangements for choir, band, and orchestra. Offered fall semester. Prerequisite(s): MUSC 2121 Minimum Grade of C and MUSC 2141 Minimum Grade of C.

MUSC 4291 - Applied Field Literature and Pedagogy for Instrumentalists*2 Credits*

Study of the professional and pedagogical literature for each instrument except piano and voice. Offered on demand.

MUSC 4481 - Instrumental Music Methods*3 Credits*

Procedures and materials in the successful administration, development and direction of instrumental music programs at the elementary, middle and high school level. Includes the beginning instrumentalist, curriculum planning, repertoire, adjudicated events, behavior management, recruiting, and public relations. Requires laboratory experience in teaching beginning instrumental students individually, in small groups and larger classes during 20 hours of field experience. Admission to the Teacher Education Program or approval of the Director of Teacher Education required. Limited to music education majors. Offered alternate spring alternate semesters. Course Attributes: Fine Arts.

MUSC 4491 - Choral Music Methods*3 Credits*

Development of the middle school and high school choral ensemble, including philosophies, technologies, classroom management, vocal production and placement, rehearsal and organizational techniques, audition procedures, production of musicals, adjudicated events and festivals, booster/parent groups, selection of repertoire, concept-based and standards-based choral music education, and curriculum. Twenty (20) hours of field experience required. Admission to the Teacher Education Program or approval of the Director of Teacher Education required. Limited to music education majors. Offered alternate fall semesters. Course Attributes: Fine Arts.

MUSC 4601 - Senior Capstone Research Project*3 Credits*

Study of a specialized area of music directed by a member of the music faculty. Serves as capstone experience for the concentrations in the Bachelor of Arts degree program: music history and literature, music theory/composition, or applied studies. Offered on demand. Prerequisite(s): MUSL 2391 Minimum Grade of S. Course Attributes: Fine Arts, Critical and Creative Thinking, Effective Communication Writing.

MUSC 4901 - Special Topics*1 to 3 Credits*

Topics include, but are not limited to, special areas in music theory, music history, and/or music education. Permission of department chair and instructor. Offered on demand. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

MUSC 4911 - Independent Study*1 to 3 Credits Grading mode is S/U*

Individual study of a course of interest to, or needed by, a music major. May be repeated as the topic varies. Offered on demand. Formerly MUSC 497. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted. Course Attributes: Requires Department Approval, Requires Instructor Approval.

Subject - Music Ensembles (MUSE)

Membership in music ensembles is open to all university students. All ensembles may be repeated for credit.

MUSE 1011 - University Singers*1 Credit*

A select group of men and women singers chosen to perform a wide variety of choral literature from various periods of music with the highest musical standards. Performances include concerts on and off campus and on tour as well as frequent appearances with various area symphony orchestras. Tours internationally every third year. Membership by audition. All vocal majors must audition for this ensemble. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1021 - Symphony Orchestra*1 Credit*

The Symphony Orchestra studies and performs the great symphonic repertoire from Baroque to the 21st century. Membership is by audition only. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1031 - Wind Orchestra*1 Credit*

Select ensemble performs standard professional and collegiate repertoire for winds and percussion. Tours internationally every third year. Membership is by audition. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1041 - Symphonic Band*1 Credit*

A fully-instrumented performance based concert ensemble studying and performing the finest wind band literature with the highest musical standards. Open to all students with prior high school instrumental experience. Placement audition required. Offered spring semester. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1051 - Marching Band*1 Credit*

The preparation and performance of music and field shows for home and selected away football games and tours internationally every third year. Open to all university students who play band instruments or are accepted for auxiliary groups. Requires successful completion of band camp prior to the start of fall semester. Placement audition required. Offered fall semester. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1111 - Opera Workshop*1 Credit*

Instruction and experience in preparation for opera performances on and off campus. Singers will study operatic literature and be coached for specific roles in public performance of opera scenes and/or fully staged operas. Membership by audition. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1131 - Chamber Singers*1 Credit*

A highly select choral ensemble of 12-16 members performing appropriate literature both a cappella and accompanied from Renaissance to Contemporary. Performances include concerts on and off campus. Membership by audition. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1141 - A Capella Ensembles*1 Credit*

A highly select men's quartet performing varied a cappella Barbershop literature. Performances include concerts on and off campus. Members are selected from the Men's Chorus. Offered on demand. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1151 - Women's Chorus*1 Credit*

Choral ensemble performing outstanding sacred and secular literature written and arranged for female voices. On occasion the chorus may combine with other university choruses to perform major choral works. Performances include concerts on and off campus and on tour. Open to all qualified women: students, faculty, staff and community members. Fulfills the requirement for a major ensemble for voice majors who are not in University Singers. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1161 - Men's Chorus*1 Credit*

A choral ensemble performing outstanding sacred and secular choral literature written and arranged for men's voices. On occasion the chorus may combine with other university choruses to perform major choral works. Performances include concerts on and off campus and on tour. Open to all qualified students. Fulfills the requirement for a major ensemble for voice majors who are not in University Singers. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1171 - Jazz Ensemble*1 Credit*

The study and performance of characteristic jazz literature. Membership is by audition. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1181 - Steel Drum Band*1 Credit*

Studies and performs music specific to the steel drum idiom. Includes music of the Caribbean, especially the island nations Guyana and Trinidad and Tobago. Performances are scheduled throughout the year, both on and off campus. Open to all qualified students. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1191 - Brass Ensemble*1 Credit*

Studies and performs characteristic brass literature. Open to all qualified students. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1201 - Percussion Ensemble*1 Credit*

Studies and performs music specific to the varied world of percussion. Includes chamber music performance opportunities for percussion majors. Performances are scheduled throughout the year, on and off campus. Open to all qualified students. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1211 - String Ensemble*1 Credit*

Ensembles of string instrumentalists for the study and performance of characteristic strings literature. Open to all qualified students. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1221 - Woodwind Ensemble*1 Credit*

A non-auditioned ensemble for all woodwinds. Open to all students and staff. Performs concerts on-campus. Open to all qualified students. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1231 - Athletic Band*1 Credit*

Athletic band provides spirited music for sports contests (men's and women's basketball games). Open to all students with prior high school instrumental experience. No formal audition required. Offered spring semester. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1241 - Composer's Workshop Ensemble*1 Credit*

Rehearses and performs literature for smaller ensembles from the 20th and 21st centuries. Also, significant experimental music from previous centuries. Emphasis on landmark works by major composers of these eras. Open to all qualified students. Offered spring semester. Unlimited repeats permitted. Course Attributes: Fine Arts.

MUSE 1251 - Chamber Music*1 Credit*

Ensembles which perform without conductor. Chamber music credits can fulfill the minor ensemble requirement. Includes standard trios, quartets and quintets for woodwinds, brass and strings as well as mixed ensembles with piano, as well as percussion ensembles. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Fine Arts.

Subject - Applied Music (MUSL)

Individual instruction in applied music is available to music majors and minors, and to some non-majors. Non-majors register for MUSL 0011 classes and take half hour lessons for one credit.

Musical Theatre majors register for MUSL 1111, 1121, 2111, 2121, 3111, 3121 courses, taking half hour lessons for one credit.

First and second-year music majors register for 1211, 1221, 2211, 2221 courses, taking hour lessons for two credits.

Third and fourth year music majors who have passed the Second-Year Applied Music Proficiency Exam (MUSL 2391) register for MUSL 3211, 3221, 4211, 4221 courses, taking hour lessons for two credits (BA and Music Education majors) or three credits (Performance majors). Students are allowed a maximum of five semesters to pass the Second Year Proficiency Exam.

Students must be eligible for upper-level status before admission to the teacher education program or the performance degree program.

Select MUSL catalog numbers are followed by a catalog suffix indicating the discipline to be studied. These catalog numbers are for the following courses:

Applied Lessons for Non-Majors (MUSL 0011)

Applied Lessons for Musical Theatre Majors (MUSL 1111, 1121, 2111, 2121, 3111, 3121)

Applied Lessons for Music Majors (MUSL 1211, 1221, 2211, 2221, 3211, 3221, 4211, 4221)

The chart below indicates the discipline and the corresponding letter suffix.

Applied Area	Catalog Suffix	Applied Area	Catalog Suffix
Voice	A	Clarinet	M
Piano	B	Bassoon	N
Harpsichord	C	Saxophone	O
Organ	D	French Horn	P
Guitar	E	Trumpet	Q
Harp	F	Trombone	R
Violin	G	Euphonium	S
Viola	H	Tuba	T
Cello	I	Percussion	U
Double Bass	J	Recorder	V
Flute	K	Jazz Improv	W
Oboe	L		

MUSL 0011 - Applied Lessons for Non-Majors*1 Credit*

Development of musical skills at all ability levels. Preference for placement in lessons is given to student participating in ONU ensembles. Skills include but are not limited to: repertoire; improvisation; sight-reading; technique; and other skills pertinent to students profession and interest. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

MUSL 0401 - Voice Class for Non-Voice Majors*1 Credit*

Introduction to a variety of technical exercises, improvisation and the basic concepts of vocal technique and song interpretation. Offered fall and spring semesters. Unlimited repeats permitted.

MUSL 0421 - Piano Class for Non-Music Majors*1 Credit*

Applied piano study for non-music majors with various levels of experience. Basic concepts for beginners and advanced concepts for experienced performers, according to individual skill level. One semester required for Musical Theatre majors. Offered fall and spring semesters. Unlimited repeats permitted.

MUSL 1011 - Piano Skills for Music Majors I*1 Credit*

Continuing course to develop functional keyboard skills and a working knowledge of piano in the music profession. Skills include: repertoire; pedaling; harmonizing; sight-reading; vocal/ instrumental open score reading; construction and maintenance of the piano; scales; arpeggios; chord warm ups; transpositions including alto and tenor clef; hymns; and improvising using appropriate accompaniment patterns. Limited to Music majors. Offered fall and spring semesters. Course Attributes: Requires Department Approval.

MUSL 1021 - Piano Skills for Music Majors II*1 Credit*

Continuation of MUSL 1011. Offered fall and spring semesters.
Prerequisite(s): MUSL 1011 Minimum Grade of C. This course may be repeated 3 times. Course Attributes: Requires Department Approval.

MUSL 1111 - Applied Lessons for Musical Theatre Majors*1 Credit*

First-year study in applied voice for Musical Theatre majors. Offered fall and spring semesters.

MUSL 1121 - Applied Lessons for Musical Theatre Majors*1 Credit*

Continuation of MUSL 1111A. Offered fall and spring semesters.
Prerequisite(s): MUSL 1111A Minimum Grade of C.

MUSL 1211 - Applied Lessons for Music Majors*2 Credits*

Applied lessons in voice to prepare for the respective proficiency exams and recitals required in the Bachelor of Arts and Bachelor of Music degree programs. Offered fall and spring semesters.

MUSL 1221 - Applied Lessons for Music Majors/Voice*2 Credits*

Continuation of MUSL 1211. Two credits. Offered fall and spring semesters. Prerequisite(s): MUSL 1211 Minimum Grade of C.

MUSL 2011 - Piano Skills/Music Majors III*1 Credit*

Continuation of MUSL 1021. Offered fall and spring semesters.
Prerequisite(s): MUSL 1021 Minimum Grade of C. This course may be repeated 4 times. Course Attributes: Requires Department Approval.

MUSL 2021 - Piano Skills/Music Majors IV*1 Credit*

Continuation of MUSL 2011. Offered fall and spring semesters.
Prerequisite(s): MUSL 2011 Minimum Grade of C. This course may be repeated 5 times. Course Attributes: Requires Department Approval.

MUSL 2041 - Piano Proficiency Exam*0 Credits Grading mode is S/U*

Comprehensive piano exam preparing music majors for keyboard use in music careers. Skills include but are not limited to sight reading, harmonization, improvisation, transposition, repertoire, choral warm ups. Registration occurs after passage of exam. Offered fall and spring semesters.

MUSL 2111 - Applied Lessons for Musical Theatre Majors*1 Credit*

Continuation of MUSL 1121A. Offered fall and spring semesters.
Prerequisite(s): MUSL 1121A Minimum Grade of C.

MUSL 2121 - Applied Lessons for Musical Theatre Majors*1 Credit*

Continuation of MUSL 2111A. Offered fall and spring semesters.
Prerequisite(s): MUSL 2111A Minimum Grade of C.

MUSL 2211 - Applied Lessons for Music Majors*2 Credits*

Continuation of MUSL 1221. Offered fall and spring semesters.
Prerequisite(s): MUSL 1221 Minimum Grade of C.

MUSL 2221 - Applied Lessons for Music Majors*2 Credits*

Continuation of MUSL 2211. Offered fall and spring semesters.
Prerequisite(s): MUSL 2211 Minimum Grade of C.

MUSL 2391 - Second Year Applied Proficiency Exam*0 Credits Grading mode is S/U*

Comprehensive juried performance exam on the major applied instrument assessing competency in technique, musicality, sight reading at the appropriate level of literature. Required to register for 3000 level study. Offered fall and spring semesters. This course may be repeated 1 time.

MUSL 3111 - Applied Lessons for Musical Theatre Majors*1 Credit*

Continuation of MUSL 2121A. Offered fall and spring semesters.
Prerequisite(s): MUSL 2121A Minimum Grade of C.

MUSL 3121 - Applied Lessons for Musical Theatre Majors*1 Credit*

Continuation of MUSL 3111A. Offered fall and spring semesters.
Prerequisite(s): MUSL 3111A Minimum Grade of C.

MUSL 3211 - Applied Lessons for Music Majors*2 to 3 Credits*

Continuation of MUSL 2221. Offered fall and spring semesters.
Prerequisite(s): MUSL 2221 Minimum Grade of C.

MUSL 3221 - Applied Lessons for Music Majors*2 to 3 Credits*

Continuation of MUSL 3211. Offered fall and spring semesters.
Prerequisite(s): MUSL 3211 Minimum Grade of C.

MUSL 3301 - Half Recital*0 Credits Grading mode is S/U*

Recital at least 30 minutes in length given typically in the fourth year of study. Required for music education majors. Offered fall and spring semesters.

MUSL 3311 - Junior Recital*1 Credit Grading mode is S/U*

Full length (60 minutes) recital in the third year of study. Required for performance majors. Offered fall and spring semesters.

MUSL 4211 - Applied Lessons for Music Majors*2 to 3 Credits*

Continuation of MUSL 3221. Offered fall and spring semesters.
Prerequisite(s): MUSL 3221 Minimum Grade of C.

MUSL 4221 - Applied Lessons for Music Majors*2 to 3 Credits*

Continuation of MUSL 4211. Offered fall and spring semesters.
Prerequisite(s): MUSL 4211 Minimum Grade of C.

MUSL 4311 - Senior Capstone Recital*1 Credit Grading mode is S/U*

Full length (60 minutes) recital in the fourth year of study. Required for performance majors. Offered fall and spring semesters. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

DEPARTMENT OF NURSING

Assistant Professors Fox, Liebrecht, N. Schroeder, White (*Interim Chair*), Woodfield; **Part-time Faculty** Bly, Carse, Hauserman, Hovest, Hoying, Kroeger, Orr, Paphanchith, Patton, Richard, K. Schroeder, M. Schroeder, Smith, Wray

Mission Statement

To address the health care needs and issues within a diverse and changing world, the nursing program at Ohio Northern University provides educational opportunities to a diverse population of qualified students who seek to acquire the knowledge and skills required for the practice of nursing as a Registered Nurse. The program actualizes this mission through integration of critical thinking in theory and practice principles to achieve evidence-based nursing practice inspired by a desire to contribute to the good of humankind. The development of the whole person reflects the emphasis of the university and prepares the student as a life-long learner in pursuit of knowledge and excellence in practice.

Vision Statement

The department is committed to being an exemplary private baccalaureate nursing program grounded in the sciences and liberal arts. Faculty and graduates are poised to become leaders whose actions and voices will transform the health needs of individuals, families and communities worldwide.

Accreditation

The program has Full Approval by the Ohio Board of Nursing (17 South High St., Suite 400, Columbus, OH 43215-7410, 614-466-3947) and is accredited by Commission on Collegiate Nursing Education (One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, 202-887-6791).

Major and Degree Offered

Nursing Major (BSN)

Licensure Offered

Graduates of the program are eligible to take the national licensing examination (NCLEX-RN) to become a Registered Nurse.

Admission Requirements

1. Meet the general admission requirements of Ohio Northern University.
2. Graduate with a cumulative grade point average (GPA) of 3.30 or higher on a scale of 4.00 from an accredited high school program (or GED).
3. Earn a minimum ACT score of 23 or a composite SAT score of 1070.
4. Before beginning clinical nursing courses pass a criminal background check and drug screening.

Special Programs

RN-BSN Nursing Completion Program

In addition to the traditional BSN degree, Ohio Northern University offers a non-traditional RN-BSN nursing completion program degree for practicing nurses. Further information about this program is available beginning on page 122.

Program Requirements

"A student shall not have impairment of the ability to practice according to acceptable and prevailing standards of safe nursing care because of physical or mental disability" (ORC Rule 4723-5-12 (16))

In accord with this rule and to ensure the safe practice of nursing, all nursing majors must possess the following:

- The ability to see, hear, touch, smell, and distinguish colors;
- The ability to speak and write with accuracy, clarity, and efficiency;
- Manual dexterity (gross and fine movement);
- The ability to learn, think critically, analyze, assess, solve problems, and reach judgments, and;
- Emotional stability and the ability to accept responsibility and accountability.

Students will need to demonstrate satisfactory application of these functions and competencies during their course of study in nursing. Students should consider their ability to demonstrate these functions and competencies when applying for admission to the nursing program of Ohio Northern University.

Students must earn a grade of 'C' or higher in all nursing core courses and all other identified required courses outside of the major in order to remain in the nursing curriculum.

Policy for Progression/Program Completion within the Nursing Major:

All students must meet the following criteria to progress to the next nursing course and complete the nursing program:

Program Progression

- Students must meet and follow the Academic Standing policy of The Getty College of Arts and Sciences and the Department of Nursing;
- A student must receive of grade of "C or higher" and a Satisfactory evaluation in the clinical portion of all clinical nursing courses to receive a passing grade in the course, students unsuccessful (D or F) must repeat both sections;
- A letter grade of "C" or above is required as a passing grade (D or F are failing grades) for identified general education courses, all identified other required courses and all nursing courses. Students who do not meet this requirement must repeat deficient coursework with a "C" or better before progressing in the program. No exceptions will be made.
- An accumulation of two (2) failures (D or F) in nursing courses may result in dismissal from the nursing program;
- Students with two failures (D or F) in nursing courses must submit a request for continuation in the nursing program (including self-assessment of reasons for failure and strategies which will increase learning and program success) to the faculty and Chair of the program;
- Students with three failures (D or F) in nursing courses will be dismissed from the program
- If a student fails a Nursing Core Course (D or F) reentry in that course is based on space availability, and faculty recommendation.

Program Completion

Students must attain the following to meet the requirements for program completion:

- complete every nursing core major requirements, required other courses and general education courses identified in the nursing curriculum;
- all nursing, required other courses and identified required courses a letter grade of "C" or higher is required;
- maintain good academic standing;
- meet university GPA requirement for graduation
- meet Getty College of Arts and Sciences Bachelor of Science basic and graduation requirements

Graduates of the program are eligible to take the National Council Licensure Examination for licensure (NCLEX) as a Registered Nurse.

Nursing Major (120 credit hours)

The 120 credit hours listed above include 52 credit hours in nursing and 68 credit hours of other required courses outside the major.

NURS 1101	Professional Concepts (1)
NURS 2101	Physical Assessment (3)
NURS 2201	Pathophysiology (3)
NURS 2301	Fundamentals of Nursing (5)
NURS 2501	Pharmacology (3)
NURS 3101	Medical Surgical Nursing I (5)
NURS 3231	Older Adult Nursing (2)
NURS 3301	Transcultural Healthcare (2)
NURS 3351	Nursing Research and Informatics (3)
NURS 3441	Mental Health Nursing (3)
NURS 3501	Nursing Care of the Developing Child and Family (5)
NURS 4101	Community Health Nursing (4)
NURS 4201	Leadership and Management in Nursing (2)
NURS 4401	Medical Surgical Nursing II (5)
NURS 4981	Transition to Professional Practice: Nursing Capstone (6)

Other required courses (68 hours)

BIOL 1101*	Principles and Concepts of Human Biology (4)
BIOL 2151*	Microbiology for Nurses (3)
BIOL 2311*	Anatomy and Physiology 1 (3)
BIOL 2321*	Anatomy and Physiology 2 (3)
BIOL 2531*	Nutrition for Nurses (3)
BIOL 3151*	Medical Terminology (1)
CHEM 1201*	Chemistry for the Health Sciences (5)
ENGL 1221*	Writing Seminar (3)
PSYC 1001*	Psychology (3)
PSYC 2151*	Development across the Lifespan (3)
STAT 1561*	Statistics for Professionals 1 (3)
TREX 1xx1*	First Year Transition (3)
EXDS 2001*	Extra-disciplinary Seminar (3)
XXXX xxx1	Fine art elective (3)
XXXX xxx1	Humanities electives (9)
XXXX xxx1	Other electives (13)

Select one:

CAMS 1301*	Presentational Speaking (3)
CAMS 2311*	Interpersonal Communication (3)
CAMS 2331*	Health Communications (3)

*Indicates other required courses outside of the major requiring a grade of 'C' or higher.

RN-BSN Nursing Completion Program

The RN-BSN completion program has been developed to meet the needs of the practicing nurse. RNs will transfer into ONU with 72 credit hours based on their diploma and/or associate degree. The program of study is 48 credit hours with a clinical experience in NURS 4251 and NURS 4991. This program is designed to be completed in one calendar year with four 12-week terms. The program is held on-site at local area hospitals.

Admission Requirements

1. Hold an associate or equivalent degree from a regionally accredited institution.
2. Possess a minimum GPA of 2.50 on a 4.00 scale.
3. Possess a current and unrestricted Ohio RN license.
4. Meet the health requirements of the clinical agencies.

Each applicant must submit an RN-BSN application, ONU Financial Aid Form, Informational Form, Computer Account Agreement, and \$30.00 application fee. All academic transcripts must be submitted to ONU directly from the institution before admission.

Completion Program Requirements

Students must attain a grade of 'C' or higher in all nursing core courses and all other identified required courses outside of the major.

RN-BSN Nursing Completion Program (Non-traditional) Degree (48 credit hours)

The 48 credit hours listed above include 24 hours of nursing courses and 24 credit hours of courses outside the major.

NURS 3011	Foundations of the Discipline and Science for the Registered Nurse (2)
NURS 3021	Physical Assessment for the Registered Nurse (3)
NURS 3051	Leadership & Mgmt in Nursing Care for the Registered Nurse (2)
NURS 3061	Transcultural Healthcare for the Registered Nurse (2)
NURS 3221	Pathophysiology for the Registered Nurse (3)
NURS 4251	Community Health Nursing for the Registered Nurse (4)
NURS 4751	Nursing Research Process and Informatics for the Registered Nurse (3)
NURS 4991	Transition to Professional Nursing Practice for Registered Nurses: Clinical Capstone (5)

Other required courses (24 hours)

ENGL xxx1	Literature elective (3) or
MLNG xxx1	Literature elective (3)
ENGL 1221*	Writing Seminar (3)
HIST xxx1	History elective (3)
RELG xxx1	Religion elective (3)
EXDS xxx1*	Extra-disciplinary Seminar (3)
XXXX xxx1	Fine art elective (3)

Select one:

CAMS 1301*	Presentational Speaking (3)
CAMS 2311*	Interpersonal Communication (3)
CAMS 2331*	Health Communications (3)

STAT 1561* Statistics for Professionals 1 (3)

* Indicates other required courses outside of the major requiring a grade of 'C' grade or higher.

Subject - Nursing (NURS)

(Class Hours+Campus Lab Hours+clinical Hours)

NURS 1101 - Professional Concepts

1 Credit

An entry level course that introduces students to concepts, theories and issues relevant to the nursing profession. The dynamics of the evolving role of nursing professional ethics and selected historical events and figures are discussed. Introduces conceptual framework of the nursing curriculum. Offered spring semester. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 1991 - Independent Study

1 to 3 Credits

Individual study of a course of interest to, or needed by a student to progress in the nursing curriculum. May be repeated according to the policies of the Department of Nursing. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 2101 - Physical Assessment (2+3+0)

3 Credits

Aspects of routine well-adult health assessment and physical examination are presented and demonstrated. Nursing techniques of inspection, palpation, percussion and auscultation are demonstrated and practiced. Emphasis is placed on differentiating normal from abnormal findings. Therapeutic communication techniques and caring behaviors are integrated with assessment skills. A lab fee is charged. Offered fall semester. Prerequisite(s): NURS 1101 Minimum Grade of C and BIOL 2311 Minimum Grade of C and CHEM 1201 Minimum Grade of C. Corequisite(s): BIOL 2321. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Critical and Creative Thinking.

NURS 2201 - Pathophysiology

3 Credits

The basis of human diseases and disorders and the interaction of environmental, biological, behavioral, and pharmacologic consequences to the disease process. Microbiological concepts applied to the understanding of normal and pathological body processes. Emphasis on the effects of degenerative, metabolic and neoplastic diseases and disorders occurring in the following body systems: immunologic, nervous, hematologic, cardiovascular, respiratory, endocrine, gastrointestinal, reproductive, skeletal, integumentary and special senses. Offered spring semester. Prerequisite(s): NURS 2101 Minimum Grade of C and BIOL 2321 Minimum Grade of C. Corequisite(s): NURS 2301, NURS 2501. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 2301 - Fundamentals of Nursing (2.5+3+6)

5 Credits

Foundation of fundamental nursing skills and related concepts basic to safe clinical practice. Concepts will be applied to nursing care in selected settings. Application of the nursing process for beginning clinical practice will be emphasized. Documentation, use of concept maps, health adaptation, teaching, learning and therapeutic communication are emphasized to promote development of nursing judgment. Basic concepts of drug therapy are introduced. Evidence based practice is explored in the clinical experience. Offered spring semester. Prerequisite(s): NURS 2101 Minimum Grade of C and BIOL 2321 Minimum Grade of C. Corequisite(s): NURS 2201, NURS 2501. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 2501 - Pharmacology

3 Credits

Principles of pharmacology including pharmacokinetics, pharmacodynamics, drug interactions, common side effects and the misuse of medications. Selected drug classifications related to the neurological, circulatory, respiratory, endocrine, immune, gastrointestinal and urinary systems and processes. Offered spring semester. Prerequisite(s): NURS 2101 Minimum Grade of C and BIOL 2321 Minimum Grade of C. Corequisite(s): NURS 2201, NURS 2301. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 2991 - Independent Study

1 to 3 Credits

Individual study of a course of interest to, or needed by a student to progress in the nursing curriculum. May be repeated according to the policies of the Department of Nursing. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 3011 - Foundations of the Discipline for the Registered Nurse

2 Credits

Aspects of historical, philosophical, theoretical and social influences on the science and professional practice of nursing is presented and examined. The conceptual framework of the nursing curriculum is introduced. Offered in first term of program. Corequisite(s): NURS 3021, NURS 3061. Must have one of the following Student Attributes: RN/BSN Completion Program.

NURS 3021 - Physical Assessment for the Registered Nurse

3 Credits

Aspects of routine well-adult health assessment and physical examination are presented and demonstrated for the registered nurse student. Nursing techniques of inspection, palpation, percussion and auscultation are demonstrated and practiced. Emphasis is placed on differentiating normal from abnormal findings. Therapeutic communication techniques and caring behaviors are integrated with assessment skills. Offered in first term of program. Corequisite(s): NURS 3011, NURS 3061. Must have one of the following Student Attributes: RN/BSN Completion Program.

NURS 3051 - Leadership and Management in Nursing Care for the Registered Nurse

2 Credits

For the professional practice nurse and focuses on leadership and management theory/principles related to contemporary nursing trends and emphasizes practice applications. Emphasis will be placed on the coordination of nursing services and care management in relation to client/patient care, peers, superiors, or subordinates. Offered in second term of program. Prerequisite(s): NURS 3011 Minimum Grade of C and NURS 3021 Minimum Grade of C and NURS 3061 Minimum Grade of C. Corequisite(s): NURS 3221. Must have one of the following Student Attributes: RN/BSN Completion Program.

NURS 3061 - Transcultural Healthcare for the Registered Nurse

2 Credits

Course is designed to build upon the Registered Nurses understanding of health beliefs, attitudes, values and practices in relation to health, illness, and health-seeking behaviors of culturally diverse individuals/groups. Cultural assessment will focus on tools, methods, nursing care adaptations. Students apply the nursing process to clients with respect for diversity and individual differences. Critical analysis of issues and trends in international health are discussed. Offered in first term of program. Corequisite(s): NURS 3011, NURS 3021. Must have one of the following Student Attributes: RN/BSN Completion Program. Course Attributes: Diversity-Human Interaction, Integration Across Disciplines.

NURS 3101 - Medical Surgical Nursing I (2.5+3+6)

5 Credits

Builds on the concepts of Fundamentals of Nursing. Acquisition and application of nursing knowledge and nursing skills with adult clients and their families who are experiencing acute and chronic health alterations in selected clinical settings. Clinical judgment, nursing process, health adaptation, teaching-learning and therapeutic communication are emphasized. Evidence based practice is integrated into this clinical experience. Offered fall semester. Prerequisite(s): NURS 2301 Minimum Grade of C and NURS 2501 Minimum Grade of C and NURS 2201 Minimum Grade of C. Corequisite(s): NURS 3231, NURS 3301. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Scientific and Quantitative Literacy.

NURS 3221 - Pathophysiology for the Registered Nurse

3 Credits

Review and further exploration of the basis of human diseases and disorders and the interaction of environmental, biological, behavioral and pharmacological consequences to the disease process. The application of previous nursing knowledge, medical and nursing diagnoses, and interventions will be applied to current and emerging knowledge. Emphasis is placed on the effects of degenerative, metabolic and neoplastic diseases and disorder occurring in the following body systems: immunologic, nervous, hematologic, cardiovascular, respiratory, endocrine, gastrointestinal, reproductive, skeletal, integumentary and special senses. Offered in second term of program. Prerequisite(s): NURS 3011 Minimum Grade of C and NURS 3021 Minimum Grade of C and NURS 3061 Minimum Grade of C. Corequisite(s): NURS 3051. Must have one of the following Student Attributes: RN/BSN Completion Program.

NURS 3231 - Older Adult Nursing

2 Credits

This course applies knowledge and the nursing process in caring for the gerontological population in selected settings and focuses on issues related to the phenomenon of aging. Gerontological nursing models are explored. Exploration of ethical issues related to aging and concepts of research in aging. Evidence based practice is applied. Offered fall semester. Prerequisite(s): NURS 2301 Minimum Grade of C and NURS 2501 Minimum Grade of C and NURS 2201 Minimum Grade of C. Corequisite(s): NURS 3101, NURS 3301. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 3301 - Transcultural Healthcare

2 Credits

To broaden an understanding and perspective of health and illness of differing sociocultural populations. Transcultural health care will introduce cultural influences which affect an individual's attitude toward institutional health care and the use thereof, and will identify culturally competent nursing interventions for the professional nursing student. Examines culturally based beliefs and values, preventive and therapeutic health

practices and caring behaviors in diverse cultural and ethnic groups. Classroom and experimental activities address cultural assessment, awareness and competence. Offered fall semester. Prerequisite(s): NURS 1101 Minimum Grade of C. Corequisite(s): NURS 3101, NURS 3231. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Diversity-Human Interaction, Integration Across Disciplines.

NURS 3351 - Nursing Research and Informatics

3 Credits

Historical developments and methodologies of nursing research as it relates to nursing practice. Development of an understanding of the research process and research proposals. Interpretation of research reports and critiquing research literature. Exploration and examination of computer technology, basic information systems, and the use of cyber technology as it relates to a variety of health care environments and nursing practice. The impact of these technologies on nursing clinical practice, nursing administration, education and research are discussed. Offered spring semester. Prerequisite(s): NURS 3231 Minimum Grade of C and NURS 3101 Minimum Grade of C and NURS 3301 Minimum Grade of C and STAT 1561 Minimum Grade of C. Corequisite(s): NURS 3441, NURS 3501. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Scientific and Quantitative Literacy.

NURS 3441 - Mental Health Nursing (2+0+4)

3 Credits

The acquisition and application of new knowledge of mental health nursing. The use of the nursing process with clients experiencing mental health alterations in selected care environments. Gain skill and refine therapeutic communication techniques and work with clients and family members in promoting therapeutic interpersonal relationships. Evidence based practice is applied in this clinical experience. Offered spring semester. Prerequisite(s): NURS 3101 Minimum Grade of C and NURS 3301 Minimum Grade of C and NURS 3231 Minimum Grade of C. Corequisite(s): NURS 3351, NURS 3501. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 3501 - Nursing Care of the Developing Child and Family (3.5+0+6)

5 Credits

Application and acquisition of knowledge development in the specialty area of maternity and pediatric nursing. Emphasis will be placed on nursing process, teaching/learning and health promotion and health maintenance in these populations. Students will care for clients in a variety of settings. Evidence based practice is applied in this clinical experience. Offered spring semester. Prerequisite(s): NURS 3231 Minimum Grade of C and NURS 3101 Minimum Grade of C and NURS 3301 Minimum Grade of C. Corequisite(s): NURS 3351, NURS 3441. Must be enrolled in one of the following Fields of Study: Nursing.

NURS 3801 - Topics in Nursing

1 to 4 Credits

The practice and principles of specialized topics in non-acute nursing care. Topics include but are not limited to: oncology, nursing care, end of life nursing care and neurological nursing care. May be repeated as the topic varies. Prerequisite(s): NURS 3101 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Nursing. Unlimited repeats permitted.

NURS 4101 - Community Health Nursing (2.5+0+6)

4 Credits

Nursing care and public health principles for families and communities. Introduction of health care policy. Epidemiology, health promotion and prevention strategies and interventions are presented. Health promotion (primary, secondary, tertiary prevention) is emphasized along with emerging community health issues and nursing interventions. Clinical leadership and management roles are explored. Evidence based practice is integrated into this clinical experience. Offered fall semester. Prerequisite(s): NURS 3351 Minimum Grade of C and NURS 3501 Minimum Grade of C and NURS 3001 Minimum Grade of C or NURS 3441 Minimum Grade of C. Corequisite(s): NURS 4201, NURS 4401. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Informed Ethical Responses.

NURS 4201 - Leadership and Management in Nursing*2 Credits*

Leadership and management theory/principles for professional nursing practice in key leadership and management areas. Health care policy, finance and regulatory environments are discussed. Current issues and trends (national, state, and local) in nursing and health care illustrate the practical application of leadership/management theory to practice and create a framework to identify, explore and analyze issues. Offered fall semester. Prerequisite(s): NURS 3351 Minimum Grade of C and NURS 3501 Minimum Grade of C and NURS 3001 Minimum Grade of C or NURS 3441 Minimum Grade of C. Corequisite(s): NURS 4101, NURS 4401. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Informed Ethical Responses.

NURS 4251 - Community Health Nursing for the Registered Nurse (2.6+0+3.5)*4 Credits*

Apply previous nursing knowledge and practice to individuals, families, groups and the practice setting of the community to promote optimal health behaviors. Review nursing care and current public health theories and principles as they relate to families, groups, and communities. Nursing process in public health nursing practice and common health problems encountered in community health nursing are studied. Offered in third term of program. Prerequisite(s): NURS 3221 Minimum Grade of C and NURS 3051 Minimum Grade of C. Corequisite(s): NURS 4751. Must have one of the following Student Attributes: RN/BSN Completion Program. Course Attributes: Informed Ethical Responses.

NURS 4401 - Medical Surgical Nursing II (2.5+3+6)*5 Credits*

Builds on concepts on previous clinical courses. Emphasizes the role of the Baccalaureate nurse in the care of the adult with acute and chronic illness across the lifespan. This course will combine complex medical surgical topics specific to the adult client. Uses the nursing process, clinical judgment principles and leadership experiences to coordinate and plan care for patients in acute care settings. Evidence based practice is integrated into this clinical experience. Offered fall semester. Prerequisite(s): NURS 3501 Minimum Grade of C and NURS 3001 Minimum Grade of C or NURS 3441 Minimum Grade of C and NURS 3351 Minimum Grade of C and BIOL 2151 Minimum Grade of C. Corequisite(s): NURS 4101, NURS 4201. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Effective Communication Non-Writing.

NURS 4751 - Nursing Research and Informatics for the Registered Nurse*3 Credits*

Major components of the research process are addressed with a focus on the professional nurse as a consumer of research. Critical thinking skills are emphasized in the analysis of current nursing research. Historical developments and the methodologies of nursing research; and study findings as it relates to patient evaluation and care. Emphasis on developing an understanding of the research process and research proposals. The interpretation of research reports and critiquing research literature to support evidence-based nursing practice is examined. Explore and examine computer technology, basic information systems, and the use of cyber technology as it relates to a variety of health care environments and nursing practice. Further discussion regarding the impact of these technologies on nursing clinical practice, nursing administration, education and research will be examined. Offered in third term of program. Prerequisite(s): (NURS 3221 Minimum Grade of C and NURS 3051 Minimum Grade of C) and (STAT 1561 Minimum Grade of C or STAT 156 Minimum Grade of C or STAT 142 Minimum Grade of C). Corequisite(s): NURS 4251. Must have one of the following Student Attributes: RN/BSN Completion Program. Course Attributes: Scientific and Quantitative Literacy.

NURS 4801 - Topics in Nursing*1 to 4 Credits*

The practice and principles of specialized topics in nursing care in acute settings. Topics to be covered include but are not limited to: emergency/urgent nursing care and ICU nursing care. May be repeated as the topic varies. Prerequisite(s): NURS 4401 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Nursing. Unlimited repeats permitted.

NURS 4981 - Transition to Professional Practice: Nursing Capstone (2.5+0+14)*6 Credits*

Students evaluate achievement of graduate outcomes. Integration of theory and practice. Provides direct nursing care and makes clinical judgments based on thorough assessment and evidence based practice. Synthesis of content from previous courses. A scholarly project is required. Offered spring semester. Prerequisite(s): NURS 4101 Minimum Grade of C and NURS 4201 Minimum Grade of C and NURS 4401 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Nursing. Course Attributes: Critical and Creative Thinking, Effective Communication Non-Writing, Effective Communication Writing.

NURS 4991 - Transition to Professional Nursing Practice for Registered Nurses: Clinical Capstone (2.6+0+7)*5 Credits*

Integration of theory and practice as in the approach to completion of the nursing major. A clinical area will be selected to carry out nursing activities that promote health potential. Assist in the decision-making process about delivery of nursing care based on a thorough assessment, analysis and exploration of potential consequences while utilizing therapeutic communication. Enhance skills needed to continue with professional role development. Clinical experiences are based on objectives developed with RN preceptor and faculty and may be chosen from a variety of settings. Offered in fourth term of program. Prerequisite(s): NURS 4251 Minimum Grade of C and NURS 4751 Minimum Grade of C. Must have one of the following Student Attributes: RN/BSN Completion Program. Course Attributes: Critical and Creative Thinking, Effective Communication Non-Writing.

DEPARTMENT OF PHILOSOPHY AND RELIGION

Professors Katayama (*Chair*), Person; **Associate Professors** Clingerman, Croskery, Dixon, Neely; **Visiting Assistant Professor** Wu; **Lecturers** Belousek, Stauber, McDonald.

Mission Statement

The mission of the Department of Philosophy and Religion is to help Ohio Northern students think critically, communicate effectively, and appreciate "a lifetime of personal growth Inspired by the higher values of truth, beauty, and goodness." This mission occurs within a curriculum that requires the acquisition of diverse knowledge and the ability to critique the Judeo Christian tradition and various other religious and philosophical traditions. The minors in religion and philosophy provide all students with opportunities to explore religious and philosophical traditions in more depth and the majors in philosophy, religion, youth ministry and philosophy, politics and economics (PPE) also offer rigorous preparation for students who wish to pursue graduate and professional studies and meaningful careers.

Majors, Minors and Degrees Offered

Law 3+3 in Religion (BA)
 Law 3+3 in Philosophy (BA)
 Law 3+3 in Philosophy, Politics and Economics (BA)
 Philosophy Major (BA)
 Philosophy, Politics and Economics (BA)
 Religion Major
 Eastern Concentration (BA)
 Western Concentration (BA)
 Youth Ministry Major (BA)
 Philosophy Minor
 Religion Minor

Special Programs**Pre-law Program**

The Department of Philosophy and Religion participates in the 3+3 Law Admissions Program, so that students majoring in Philosophy, Religion, or Philosophy, Politics and Economics (PPE) may participate in the program. For more information, see the fuller description on page 22.

Seminary Preview Program Partnership

Ohio Northern University participates in the Methodist Theological Seminary in Ohio's Seminary Preview Program. Eligible students are able to enroll tuition-free in no more than two courses offered by MTSO. Students in their junior or senior years with a GPA of 3.00 or higher who have taken at least two courses in religion at ONU are eligible. More information is available from the chair of the Department of Philosophy and Religion.

Pre-seminary Program

A faculty member in the Department of Philosophy and Religion serves as advisor to pre-seminary students in planning a preprofessional program. The recommendations of the American Association of Theological Schools are followed in advising students. A major in the department of philosophy and religion or in another appropriate department may be selected.

Major Course Requirements

All required courses in the major must be completed with a grade of 'C' or higher.

Philosophy Major (30 credit hours)

Philosophy is a quest for a comprehensive understanding of human existence. The objective of philosophy is to consider the rational justification of logical inferences, human values, criteria for establishing the claims of knowledge and certainty, and interpretations of the nature of reality. The diverse insights of significant philosophers from ancient times to the present contribute resources to stimulate contemporary philosophical thinking in each of these areas.

A major in philosophy prepares students generally for careers in areas which require the ability to analyze problems and to think and write clearly. It is an appropriate major for students planning to continue their education for professional careers such as law, medicine, or theology.

PHIL 2021	Ancient Philosophy (3)
PHIL 2341	Logic (3)
PHIL xxx1 ¹	Elective (15)
PHIL 4811	Philosophy Senior Essay 1 (1)
PHIL 4911	Philosophy Senior Essay 2 (2)

Select one:
PHIL 3201 Political Philosophy (3)
PHIL 3441 Ethical Theory (3)

Select one:
PHIL 3401 Metaphysics (3)
PHIL 3551 Epistemology (3)

¹No more than two PHIL courses (6 credit hours) at the 1000-level may count towards the major.

Philosophy, Politics and Economics (PPE) Major (33 credit hours)

PPE is an interdisciplinary major that draws together the knowledge base and intellectual skills of the three component disciplines: philosophy, politics and economics. Philosophy provides students with an understanding of the normative foundations of social organization; political science provides them with an understanding of the workings of social institutions; and economics provides them with the contemporary analysis of market forces and their effects on social issues. All three disciplines hone the critical thinking skills of students as well as their analytical skills in reading and writing, but each of them do so from a different vantage point: philosophy from the normative and theoretical standpoint; political science from the theoretical, empirical, and applied standpoint; and economics from the quantitative standpoint at the levels of both theory and practice.

The breadth of multidisciplinary skills required of the PPE major prepares students for careers in private enterprise, government, private foundations, research institutes, and non-profit organizations. PPE is excellent preparation for graduate study in business, public affairs, public policy, and especially appropriate preparation for law school.

Philosophy: (9 credits)

PHIL 2341: Logic (3)
PHIL 2281: Philosophy of Law (3)

Select one:

PHIL 3441: Ethical Theory (3)
PHIL 3101: Environmental Ethics (3)
PHIL 3201: Political Philosophy (3)

Political Science: (9 credits)

PLSC 1011: Introduction to American Politics (3)
PLSC 1021: Introduction to International Relations (3)

Select one:

PLSC 25x1 or higher (3)
HSPS 25x1 or higher (3)

[See page 84 for the Department of History, Politics and Justice for the course descriptions of PLSC and HSPS.]

Economics: (9 credits)

BIZ 2021: Microeconomic Foundations for Business Planning (3)
BIZ 2031: Macroeconomic Foundations for Business Planning (3)
IBEC 3831: Managerial Economics (3)

[See page 154 for the James F. Dicke College of Business Administration for the course descriptions of BIZ and IBEC.]

PPE 4811: Senior Essay I (1)
PPE 4911: Senior Essay II (2)
(These PPE courses will be developed in 2015-16)

Select one (Elective):

PHIL 3xx1 or higher (3)
PLSC 3xx1 or higher (3)
HSPS 3xx1 or higher (3)
IBEC 3xx1 or higher (3)

Religion Major (30 credit hours)

Religion is an integral part of human life and culture. It includes the ultimate commitments, attitudes, beliefs and forms of worship by which people live and find meaning for their personal and social existence. The courses in religion are intended to acquaint the student with the living religious traditions through an examination of their origins and development, their interaction with the changing cultural context, and their insights for dealing with the perennial questions of human existence and destiny. The approach to the study is ecumenical and makes use of current scholarly methods of research and findings.

Students majoring in religion must select one of the following concentrations: Eastern or Western. The 30 credit hours listed above include the 12 credit hours required in common plus the additional 18 credit hours required for the concentration.

RELG 2031	Eastern Religious Traditions (3)
RELG 2041	Western Religious Traditions (3)
RELG xxx1 ^{1,2}	Elective (3)
RELG 4901	Religion Senior Essay 1 (1)
RELG 4911	Religion Senior Essay 2 (2)

Eastern Concentration

PHIL 2431 Asian Philosophies (3)
RELG xxx1^{1,2} Elective in Western Traditions (3)
RELG xxx1^{1,3} Electives in Eastern Traditions (12)

Western Concentration

PHIL 2251 Philosophy of Religion (3)
RELG xxx1^{1,2} Elective in Eastern Traditions (3)
RELG xxx1^{1,3} Electives in Western Traditions (12)

¹No more than three RELG courses (9 credit hours) at the 1000 level may count towards the major. Only the second semester of the biblical languages may count towards the major.

²This course may be at the 1000 level.

³No more than one RELG course (3 credit hours) at the 1000 level may count towards these 12 credits.

Youth Ministry Major (55 credit hours)

RELG 2001	Old Testament (3)
RELG 2011	New Testament (3)
RELG 2031	Eastern Religious Traditions (3)
RELG 3001	Christian Thought to 1500 (3)
RELG 3011	Christian Thought 1500 to the Present (3)
RELG xxx1 ¹	Elective in Bible (3)
RELG xxx1 ¹	Elective in contemporary Christian thought (3)
RELG xxx1	Elective in a religious tradition other than Christianity (3)
RELG 4901	Religion Senior Essay 1 (1)
RELG 4911	Religion Senior Essay 2 (2)
YMIN 0011	Youth Ministry Observation 1 (0)
YMIN 0021	Youth Ministry Observation 2 (0)
YMIN 0031	Youth Ministry Observation 3 (0)
YMIN 0041	Internship: Group Reflection (0)
YMIN 2531	Youth Ministry Settings and Issues (3)
YMIN 4101	Youth Ministry Internship (4)
YMIN 4531	Principles of Christian Education (3)

Other required courses

PHIL 2251	Philosophy of Religion (3)
PSYC 1001	Psychology (3)
PSYC 2151	Development across the Lifespan (3)
PSYC 2261	Human Sexual Behavior (3)
SOC 1001	Sociology (3)
SOC 2401	Sociology of the Family (3)

¹This course may be at the 1000-level. No more than three RELG courses (12 credit hours) at the 1000-level may count towards the major. Only the second semester of the biblical languages may count towards the major.

Minor Course Requirements

All courses required for a minor must be completed with a grade of 'C' or higher.

Philosophy Minor (18 credit hours)

PHIL 2021	Ancient Philosophy (3)
PHIL 2341	Logic (3)
PHIL 3401	Metaphysics (3)
	or
PHIL 3551	Epistemology (3)
PHIL xxx1	Electives (9)

Religion Minor (18 credit hours)

RELG 2031	Eastern Religious Traditions (3)
RELG 2041	Western Religious Traditions (3)
RELG xxx1	Electives (12)

Subject - Philosophy (PHIL)**PHIL 1001 - Theories of Human Nature**

3 Credits

Philosophical inquiry into rival theories of human nature with reference to religion, psychology, and science. Consideration of the various philosophical problems, such as the role of reason, free-will and determinism, the relationship between the individual and the universe/God (as well as society), moral psychology, and gender differences. Course Attributes: Humanities, Diversity-Human Interaction.

PHIL 1011 - Plato

3 Credits

Plato's early to middle dialogues, including the Republic. Course Attributes: Humanities, Informed Ethical Responses.

PHIL 1021 - Philosophy of Science

3 Credits

Explores the logical and philosophical foundations that underlie science. Specific issues include: what is the difference between science and pseudo-science, what are scientific explanations, laws and theories, and what are science's limits? Course Attributes: Humanities, Integration Across Disciplines.

PHIL 1031 - Philosophy of Identity

3 Credits

Explores the question of who we are by examining questions related to our social identity, specifically how our identity is affected by attributes such as race, gender, and class and by the societal reaction to those attributes. Course Attributes: Humanities, Diversity-Human Interaction.

PHIL 1041 - Philosophy and Film

3 Credits

An exploration of perennial philosophical questions. What is real? What can I know? What is life's meaning? through classic and modern films and traditional philosophical treatises. Question concerning whether film is an appropriate medium in which to pursue philosophical issues. Course Attributes: Humanities, Diversity-Human Interaction.

PHIL 1051 - Ethics, Justice and Law

3 Credits

An exploration of challenging and controversial issues such as euthanasia, the meaning of equality, and the role of religious beliefs in a society with multiple religious traditions, starting with issues at the level of personal ethical beliefs, then moving to broader issues of social justice, and concluding with the role of law in a pluralistic society. Course Attributes: Humanities, Diversity-Human Interaction, Informed Ethical Responses.

PHIL 1901 - Special Topics in Philosophy

1 to 3 Credits

May be repeated for credit, depending on content. Unlimited repeats permitted.

PHIL 2021 - Ancient Philosophy

3 Credits

Greek philosophical traditions against the background of the Pre-Socratics and Socrates, with a special emphasis on Plato and Aristotle. Course Attributes: Humanities, Critical and Creative Thinking, Informed Ethical Responses.

PHIL 2251 - Philosophy of Religion

3 Credits

Critical inquiry into issues such as the nature and existence of God, the problem of evil, the significance of religious experience, the justification of religious belief, and the relation of faith and reason. Course Attributes: Humanities, Critical and Creative Thinking, Integration Across Disciplines.

PHIL 2281 - Philosophy of Law

3 Credits

Major philosophical theories of law, from legal positivism to originalism. Application to topics such as criminal law, contract law, and constitutional interpretation. Specific applications include but are not limited to: free speech, the insanity defense, and surrogate mother contracts. Course Attributes: Humanities, Informed Ethical Responses.

PHIL 2341 - Logic

3 Credits

Logical fallacies and the principles of correct reasoning. The application of formal logical analysis to arguments encountered in ordinary language. Course Attributes: Humanities, Critical and Creative Thinking.

PHIL 2401 - Professional Ethics

3 Credits

Major ethical theories and their application to the professions and topics that arise in the professional setting. The nature of professions and responsibilities to clients and the public. Offered fall and spring semesters. Course Attributes: Humanities, Informed Ethical Responses.

PHIL 2431 - Asian Philosophies

3 Credits

Asian philosophical traditions on the metaphysical, epistemological, logical, and ethical questions about the universe's and human beings' origins, natures and purposes, including the historical origins of these traditions, their development, and interactions. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction.

PHIL 2901 - Special Topics in Philosophy

1 to 3 Credits

May be repeated for credit, depending on content. Unlimited repeats permitted.

PHIL 2971 - Independent Study in Philosophy*1 to 3 Credits*

May be repeated for credit, depending on content. Must be enrolled in one of the following Fields of Study: Philosophy. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

PHIL 3101 - Environmental Ethics*3 Credits*

Theories of value, with special emphasis on the possible justification of extending the moral community to include non-human nature. Foci will include future generations, pollution, the commons, 'jobs vs. wilderness,' and legal and moral rights. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Humanities, Informed Ethical Responses.

PHIL 3201 - Political Philosophy*3 Credits*

Theories of political philosophy, such as social contract, libertarianism, utilitarianism, feminist, and political liberalism. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Humanities, Diversity-Human Interaction, Informed Ethical Responses.

PHIL 3401 - Metaphysics*3 Credits*

Classical metaphysical questions about human nature and the world, such as the nature of reality, essence, existence, and causation. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Humanities, Critical and Creative Thinking, Effective Communication Non-Writing.

PHIL 3441 - Ethical Theory*3 Credits*

Major ethical theories, such as utilitarianism, deontology, and virtue theory. Additional topics, such as ethical egoism, moral realism, and ethical relativism. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Humanities, Critical and Creative Thinking.

PHIL 3551 - Epistemology*3 Credits*

Knowledge, its origins, structure, scope, justification and limitations, with reference to such problems as skepticism, realism, sense perception, mental representation, opinion and truth. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Humanities, Critical and Creative Thinking.

PHIL 3901 - Special Topics in Philosophy*1 to 3 Credits*

May be repeated for credit, depending on content. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Unlimited repeats permitted.

PHIL 4811 - Philosophy Senior Essay I*1 Credit*

The first stage of the philosophy capstone project: completion of a rough draft of a critical essay on a topic selected in consultation with a faculty advisor. Must be enrolled in one of the following Major fields of study: Philosophy. Course Attributes: Humanities, Critical and Creative Thinking.

PHIL 4911 - Philosophy Senior Essay II*2 Credits*

The second and final stage of the philosophy capstone project: completion of and presentation of the critical essay begun in PHIL 4811. Prerequisite(s): PHIL 4811 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Philosophy. Course Attributes: Humanities, Effective Communication Non-Writing, Effective Communication Writing.

PHIL 4971 - Independent Study in Philosophy*1 to 3 Credits*

May be repeated for credit, depending on content. Must be enrolled in one of the following Fields of Study: Philosophy. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Religion (RELG)**RELG 1001 - Death and Beyond in World Religions***3 Credits*

An examination of distinct religious perspectives on individuals' dying, afterlife, and additional goals beyond the experience of physical death. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction.

RELG 1011 - Encountering the Other*3 Credits*

The diversity of religious and cultural worldviews and practices, with primary focus on the phenomenon of 'otherness,' or 'difference,' and its personal and social ramifications. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction.

RELG 1021 - Christianity and Natural World*3 Credits*

Christian theological and ethical responses to nature. Discussion of how Christianity has historically understood the doctrine of creation. The diverse ways that contemporary Christianity interprets the material world. Course Attributes: Humanities.

RELG 1031 - Religion and Culture*3 Credits*

The relationship between religious worldviews and culture, including fine arts, technology, and popular media. Different theological models that can be used to understand how culture challenges and influences religion. Course Attributes: Humanities.

RELG 1041 - Women in the Bible*3 Credits*

The portrayal of women in the Old and New Testaments with secondary readings of feminist theory. Course Attributes: Humanities, Diversity-Human Interaction, Informed Ethical Responses.

RELG 1051 - American Christianity*3 Credits*

An introductory survey of the varieties of American Christian religious experience, from Puritanism to mormonism, from evangelicalism to the rise of Pentecostalism/charismatic movement, to newer expressions of the church. Course Attributes: Humanities, Diversity-Human Interaction.

RELG 1071 - Religions East and West*3 Credits*

Representative major religions of the world, their origins, sacred writings, basic beliefs, and life practices, with special attention to non-Western religious traditions. Course Attributes: Humanities, Diversity-Human Interaction.

RELG 1911 - Special Topics in Religion*3 Credits*

May be repeated for credit, depending on content. Unlimited repeats permitted. Course Attributes: Humanities.

RELG 2001 - Introduction to Old Testament*3 Credits*

Critical reading of the Old Testament (Hebrew Bible): its historical background, literary features, and theological claims. Course Attributes: Humanities, Diversity-Human Interaction.

RELG 2011 - Introduction to New Testament*3 Credits*

Critical reading of the New Testament: its historical background, literary features, and theological claims. Course Attributes: Humanities, Diversity-Human Interaction.

RELG 2021 - Islam*3 Credits*

The ideas and practices of the Muslim tradition, with emphasis on Islam's scriptural base, historical development, societal impact, and encounter with the West and with other religious traditions. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction.

RELG 2031 - Eastern Religious Traditions*3 Credits*

Major religions of Asia: their origins, sacred writings, basic beliefs, life practices, and, where applicable, presence in the West. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction.

RELG 2041 - Western Religious Traditions*3 Credits*

Major Semitic/Western religions: their origins, sacred writings, basic beliefs, life practices, and variations around the world. Course Attributes: Humanities, Diversity-Human Interaction.

RELG 2051 - Hinduism*3 Credits*

The ideas and practices of the Hindu tradition, with emphasis on historical development, varied literatures, societal influence, and encounters with the contemporary West. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction.

RELG 2061 - Issues in Science & Religion*1 Credit*

Investigation of the work of a major figure in the contemporary science and religion dialogue. Students are required to attend annual weekend Goshen Conference on Religion and Science, where students will have the opportunity to interact with the author being studied. Fee required. Unlimited repeats permitted. Course Attributes: Integration Across Disciplines.

RELG 2711 - Biblical Hebrew 1*0 or 3 Credits*

Biblical Hebrew with heavy emphasis on grammar and vocabulary. Course Attributes: Humanities.

RELG 2731 - Biblical Hebrew 2*0 or 3 Credits*

Biblical Hebrew with an emphasis on grammar and vocabulary as well as readings from the Hebrew Bible. Prerequisite(s): RELG 2711 Minimum Grade of C or RELG 271 Minimum Grade of C. Course Attributes: Humanities.

RELG 2811 - Biblical Greek 1*3 Credits*

Biblical Greek with heavy emphasis on grammar and vocabulary and readings from the Greek New Testament. Course Attributes: Humanities.

RELG 2831 - Biblical Greek 2*3 Credits*

Biblical Greek with heavy emphasis on grammar and vocabulary and readings from the Greek New Testament. Prerequisite(s): RELG 2811 Minimum Grade of C or RELG 281 Minimum Grade of C. Course Attributes: Humanities.

RELG 2911 - Special Topics in Religion*1 to 3 Credits*

May be repeated for credit, depending on content. Unlimited repeats permitted.

RELG 2981 - Independent Study in Religion*1 to 3 Credits*

May be repeated for credit, depending on content. Must be enrolled in one of the following Fields of Study: Religion, Youth Ministry. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

RELG 3001 - Christian Thought to 1500*3 Credits*

Christian history, theology and ethics from the formative period of the Church to the late Middle Ages. Emphasis on the Christian response to cultural settings, efforts to define orthodoxy, philosophers, theologians and mystics. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Humanities, Critical and Creative Thinking, Effective Communication Writing.

RELG 3011 - Christian Thought 1500 to the Present*3 Credits*

Christian history, theology and ethics from the Reformation to the present. The rise of confessions, Enlightenment challenges to religion, and

representative theologians and issues from the past two centuries. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Humanities, Critical and Creative Thinking, Effective Communication Non-Writing.

RELG 3021 - Buddhism*3 Credits*

The ideas and practices of the Buddhist tradition in Asia as well as in the West, with emphasis on the life and teachings of the Buddha and the evolution of extremely diverse forms of Buddhism. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Non Western Cultural, Humanities, Diversity-Human Interaction.

RELG 3911 - Special Topics in Religion*1 to 3 Credits*

May be repeated for credit, depending on content. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Unlimited repeats permitted.

RELG 4901 - Religion Senior Essay I*1 Credit*

The first stage of the capstone project for religion majors and youth ministry majors: completion of an annotated bibliography on a selected topic in consultation with a faculty advisor. Must be enrolled in one of the following Major fields of study: Religion, Youth Ministry. Course Attributes: Humanities, Critical and Creative Thinking.

RELG 4911 - Religion Senior Essay II*2 Credits*

The second and final stage of the capstone project for religion majors and youth ministry majors: completion of and presentation of the research paper proposed in RELG 4901. Prerequisite(s): RELG 4901 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Religion, Youth Ministry. Course Attributes: Humanities, Effective Communication Non-Writing, Effective Communication Writing.

RELG 4981 - Independent Study in Religion*1 to 3 Credits*

May be repeated for credit, depending on content. Must be enrolled in one of the following Fields of Study: Religion, Youth Ministry. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Youth Ministry (YMIN)**YMIN 0011 - Youth Ministry Observation 1***0 Credits Grading mode is S/U*

Observation of and reflection on youth ministry in a congregational setting related to one's own denominational tradition. Must be enrolled in one of the following Fields of Study: Youth Ministry.

YMIN 0021 - Youth Ministry Observation 2*0 Credits Grading mode is S/U*

Observation of and reflection on youth ministry in a congregational setting different from one's own denominational tradition. Must be enrolled in one of the following Fields of Study: Youth Ministry.

YMIN 0031 - Youth Ministry Observation 3*0 Credits Grading mode is S/U*

Observation and reflection on ministry to youth in a culturally, racially, and/or socioeconomically diverse setting. Must be enrolled in one of the following Fields of Study: Youth Ministry.

YMIN 0041 - Internship: Group Reflection*0 Credits Grading mode is S/U*

Group reflection on issues pertaining to students' internships. Must be enrolled in one of the following Fields of Study: Youth Ministry.

YMIN 2531 - Youth Ministry Issues and Settings*3 Credits*

Exploration of various settings for youth ministry, including weekly youth meetings, camps, mission trips, Sunday School, and community service. Offered alternate years. Prerequisite(s): (YMIN 001 Minimum Grade of S or YMIN 0011 Minimum Grade of S) and (YMIN 002 Minimum Grade of S or YMIN 0021 Minimum Grade of S) and (YMIN 003 Minimum Grade of S or YMIN 0031 Minimum Grade of S). Must be enrolled in one of the following Fields of Study: Youth Ministry.

YMIN 2901 - Special Topics in Youth Ministries

1 to 3 Credits

May be repeated for credit depending on course content. Must be enrolled in one of the following Fields of Study: Youth Ministry. Unlimited repeats permitted.

YMIN 2991 - Independent Study in Youth Ministries

1 to 3 Credits

May be repeated for credit, depending on content. Must be enrolled in one of the following Fields of Study: Youth Ministry. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

YMIN 3901 - Special Topics in Youth Ministries

1 to 3 Credits

May be repeated for credit, depending on content. Must be enrolled in one of the following Fields of Study: Youth Ministry. Unlimited repeats permitted.

YMIN 4101 - Youth Ministry Internship

1 to 3 Credits

Internship in youth ministry in various possible settings: congregation, camp, mission trip, etc. Each credit hour requires 45 hours of practicum experience. Prerequisite(s): (YMIN 001 Minimum Grade of C or YMIN 0011 Minimum Grade of C) and (YMIN 002 Minimum Grade of C or YMIN 0021 Minimum Grade of C) and (YMIN 003 Minimum Grade of C or YMIN 0031 Minimum Grade of C). Corequisite(s): YMIN 0041. Must be enrolled in one of the following Fields of Study: Youth Ministry. This course is repeatable for a total of 6 hours.

YMIN 4531 - Principles of Christian Education

3 Credits

The philosophy, theory, and current methods of Christian education. The relationship of Christian education to other areas of ministry (e.g., worship). Offered alternate years. Prerequisite(s): (YMIN 2531 Minimum Grade of C or YMIN 253 Minimum Grade of C) and (YMIN 4101 Minimum Grade of C or YMIN 410 Minimum Grade of C). Must be enrolled in one of the following Fields of Study: Youth Ministry.

YMIN 4991 - Independent Study in Youth Ministries

1 to 3 Credits

May be repeated for credit depending on course content. Must be enrolled in one of the following Fields of Study: Youth Ministry. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

DEPARTMENT OF PHYSICS AND ASTRONOMY

Professors Me. Caragiu (*Chair*), Pinkney, Sheridan, Theisen.

Mission Statement

The department offers a strong, in-depth education through courses and extra-curricular activities that stimulate the process of reasoning from fundamental experimental facts. Students are prepared to participate in active undergraduate research with physics faculty, culminating with conference presentations or publications. The department aims to give training with a sufficiently broad perspective to enable students to pursue graduate work in physics and related disciplines; to apply physics in engineering, medicine, and other sciences; and to teach physics in the public schools.

Accreditation

The secondary education program for licensure to teach physics is approved by the Ohio Department of Education and nationally accredited by the National Council for Accreditation of Teacher Education (NCATE).

Majors, Minors and Degrees Offered

Physics Major

Applied Physics Concentration (BS)

Astronomy Concentration (BS)

Physics Concentration (BS)

Astronomy Minor

Physics Minor

Licensure Offered

Adolescent Young Adult (7-12) Integrated Science Licensure

Adolescent Young Adult (7-12) Physical Sciences: Chemistry & Physics Licensure

Adolescent Young Adult (7-12) Physical Sciences: Physics Licensure

Admission Requirements

Students pursuing teacher licensure must request acceptance into the Center for Teacher Education.

Research Opportunities

The department offers a variety of research opportunities for interested students including research in astronomy, plasma physics, solid state, astrophysics, atomic physics and optics.

Major Course Requirements

All required courses in major subject area must be completed with a grade of 'C' or higher. All required courses outside of the major subject area must be completed with a grade of 'D' or higher.

Physics Major (37-63 credit hours)

Students majoring in physics are required to complete one of three concentrations: physics, astronomy, or applied physics. The 37-63 credit hours above include 8 required major courses and 2 other required courses plus 27 credit hours for the physics concentration, or 35 credit hours for the astronomy concentration, or 9 credit hours for the applied physics concentration.

Required major courses

PHYS 2311^{1,2} Physics 1 (3)

PHYS 2321^{1,2} Physics 2 (3)

PHYS 2341 Physics Laboratory 1 (1)

PHYS 2351 Physics Laboratory 2 (1)

PHYS 3051 Modern Physics (3)

PHYS 3451 Math Methods (3)

PHYS 3731¹ Analytical Mechanics (3)

PHYS 4111¹ Electricity and Magnetism 1 (3)

Other required courses

MATH 1631 Calculus 1 (4)

MATH 1641 Calculus 2 (4)

Physics Concentration (27 credit hours)

PHYS 3011 Advanced Physics Lab (2)

PHYS 3751 Quantum Mechanics (3)

PHYS 3951 Independent Research (1)

PHYS 3xx1¹ Physics elective (3)

PHYS 3xx1¹ Physics elective (3)

PHYS 4121 Electricity and Magnetism 2 (3)

PHYS 4951 Senior Thesis Seminar (1)

Other required courses

ECCS 1611 Programming 1 (3)

MATH 2631 Calculus 3 (4)

MATH 2651 Differential Equations (4)

Astronomy Concentration (35 credit hours)

PHYS 1051 Planetary Astronomy (3)

PHYS 1061 Stars and Galaxies (3)

PHYS 1081 Planetary Astronomy Laboratory (1)

PHYS 1091 Stars and Galaxies Laboratory (1)

PHYS 3xx1¹ Physics elective (3)

PHYS 3011 Advanced Physics Lab (2)

PHYS 3471 Introductory Astrophysics (3)

PHYS 3751 Quantum Mechanics (3)

PHYS 3951 Independent Research (1)

PHYS 4121 Electricity and Magnetism 2 (3)

PHYS 4951 Senior Thesis Seminar (1)

Other required courses

ECCS 1611 Programming 1 (3)

MATH 2631 Calculus 3 (4)

MATH 2651 Differential Equations (4)

Applied Physics Concentration (9 credit hours)

The applied physics concentration is intended for students who are completing the requirements for a second program in addition to the physics major. Examples of this second program include a second major, a minor, or a program of courses leading to licensure for public school teaching.

PHYS 1051	Planetary Astronomy (3)
	or
PHYS 1061	Stars and Galaxies (3)
	and
PHYS 3xx ¹	Physics elective (3)
PHYS 3xx ¹	Physics elective (3)

Teacher Licensure in Physics This option is available to students majoring in physics (58 credit hours)

CHEM 1711	General Chemistry 1 (5)
CHEM 1721	General Chemistry 2 (5)
BIOL 1311	Biology 1: Cells and Molecules (4)
EDUC 1151	Culture and Schooling (3) (20 hours field)
EDUC 2101	Exceptional Learners (3) (20 hours field)
EDUC 2681	Curriculum and Assessment (3) (20 hours field)
EDUC 3201	Instructional Media and Educational Technologies (3)
EDUC 3451	Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4401	Educational Psychology and Instructional Practices (3) (20 hours field)
EDUC 4511	Integrated Science Methods (3) (20 hours field)
EDUC 4451	Leadership Seminar in Education (2)
EDUC 4651	Science Education Portfolio (0)
EDUC 4721	Student Teaching/AYA (12)

Specified general education courses

CAMS 1311	Communication in the Classroom (3)
PSYC 1001	Psychology (3)
PSYC 2171	Adolescent Psychology (3)

Minor Course Requirements

All courses required for a minor must be completed with a grade of 'C' or higher.

Astronomy Minor (22 credit hours)

PHYS 1051	Planetary Astronomy (3)
PHYS 1061	Stars and Galaxies (3)
PHYS 1081	Planetary Astronomy Laboratory (1)
PHYS 1091	Stars and Galaxies Laboratory (1)
PHYS 2311 ^{1,2}	Physics 1 (3)
PHYS 2321 ^{1,2}	Physics 2 (3)
PHYS 2341	Physics Laboratory 1 (1)
PHYS 2351	Physics Laboratory 2 (1)
PHYS 3051	Modern Physics (3)
PHYS 3471	Introductory Astrophysics (3)

Physics Minor (20 credit hours)

PHYS 2311 ^{1,2}	Physics 1 (3)
PHYS 2321 ^{1,2}	Physics 2 (3)
PHYS 2341	Physics Laboratory 1 (1)
PHYS 2351	Physics Laboratory 2 (1)
PHYS 3051	Modern Physics (3)
PHYS 3xx ¹	Physics elective (3)
PHYS 3xx ¹	Physics elective (3)
PHYS 3xx ¹	Physics elective (3)

¹Substitution of courses may be made with the approval of the chair of the Department of Physics. Substituted courses may be either internal to the Department of Physics or external. A maximum of 3 external credit hours may be substituted provided a grade of 'C' or higher is earned in the corresponding course. Internal substitutions which may be allowed are PHYS 2111 for PHYS 2311 or PHYS 2121 for PHYS 2321. External substitutions which may be allowed are ENGR 2131 for PHYS 3731, ECCS 3111 for PHYS 4111, or CHEM 3421 for PHYS 3531.

²Some of the courses listed contain material which is similar but treated at different levels. Consequently, credit for both PHYS 2111 and 2311, or PHYS 2121 and 2321, cannot be given toward satisfying minimum program requirements.

Subject - Physics (PHYS)

PHYS 1001 - Conceptual Physics

3 Credits

Issues involving science and society, classical physics, relativity, atomic and nuclear physics. Students may not receive credit for PHYS 1001 after completion of either PHYS 2121 or 2321. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

PHYS 1031 - Exploring Physics and Astronomy

3 Credits

The course will take a detailed look at important historical and cultural perspectives on astronomy. Qualitative and quantitative study of physics used in art including the Fibonacci sequence, the golden ratio and fractal art. Course Attributes: Math\Natural Sciences.

PHYS 1051 - Planetary Astronomy

3 Credits

Introduction to solar system science, history of astronomy, telescopes, basic earth science. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

PHYS 1061 - Stars and Galaxies

3 Credits

Structure, motions and evolution of stars, interstellar material, galaxies and the universe as a whole. Course Attributes: Math\Natural Sciences, Scientific and Quantitative Literacy.

PHYS 1081 - Planetary Astronomy Laboratory

1 Credit

Laboratory and mathematical companion to PHYS 1051.

PHYS 1091 - Stars and Galaxies Laboratory

1 Credit

Laboratory and mathematical companion to PHYS 1061.

PHYS 1901 - Special Topics in Physics

1 to 3 Credits

This course may be repeated 4 times. This course is repeatable for a total of 6 hours.

PHYS 1911 - Special Topics in Summer Honors Institute

1 to 3 Credits

Topics in Physics. Enrollment is restricted to attendees of the Summer Honors Institute. May be repeated as the topic varies. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

PHYS 2051 - Physics with Health Science Applications

3 Credits

Selected basic physical principles and their application to health science. Topics include levers and torques, fluid dynamics, electrical conduction, magnetism, optics, and radiation. Course Attributes: Math\Natural Sciences.

PHYS 2111 - General Physics 1

3 Credits

Classic Newtonian mechanics. Oscillatory motion. Thermodynamics. Algebra and trigonometry used. The corresponding laboratory is PHYS 2341. Offered fall semester. Course Attributes: Math\Natural Sciences.

PHYS 2121 - General Physics 2

3 Credits

Electric and magnetic phenomena. Waves, sound, and optics. Algebra and trigonometry are used. The corresponding laboratory is PHYS 2351. Offered spring semester. Prerequisite(s): PHYS 2111 or PHYS 2311 or PHYS 211 or PHYS 231. Course Attributes: Math\Natural Sciences.

PHYS 2311 - Physics 1*3 Credits*

Classic Newtonian mechanics. Oscillatory motion. Thermodynamics. Differential and integral calculus are used. The corresponding laboratory is PHYS 2341. Offered fall and spring semesters. Prerequisite(s): MATH 1611 or MATH 1631 or MATH 157 or MATH 163. Course Attributes: Math\Natural Sciences.

PHYS 2321 - Physics 2*3 Credits*

Electric and magnetic phenomena. Waves, sound, and optics. Differential and integral calculus are used. The corresponding laboratory is PHYS 2351. Offered fall and spring semesters. Prerequisite(s): PHYS 2311 or PHYS 231. Course Attributes: Math\Natural Sciences.

PHYS 2341 - Physics Laboratory 1*1 Credit*

Experiments in Newtonian mechanics. Oscillatory motion. Thermodynamics. PHYS 2111 or 2311 should be taken concurrently, or instructor's permission must be obtained. Offered fall and spring semesters.

PHYS 2351 - Physics Laboratory 2*1 Credit*

Experiments in electricity and magnetism, and optics. PHYS 2121 or 2321 should be taken concurrently, or instructor's permission must be obtained. Offered fall and spring semesters.

PHYS 2901 - Special Topics in Physics*1 to 3 Credits*

This course may be repeated 4 times. This course is repeatable for a total of 6 hours.

PHYS 2931 - Independent Study*1 to 3 Credits*

Individual study of topics in physics. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted.

PHYS 3011 - Advanced Physics Research Lab*2 Credits*

Statistical analysis of data and error propagation. Linear and non-linear curve fitting. Design and construction of scientific apparatus. Signal conditioning. Optical techniques. Vacuum systems. Research and scholarship ethics. Offered alternate spring semesters. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Effective Communication Non-Writing, Informed Ethical Responses.

PHYS 3051 - Modern Physics*3 Credits*

General and special relativity, quantum and wave mechanics, atomic and nuclear physics. Offered spring semester. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Math\Natural Sciences, Integration Across Disciplines.

PHYS 3111 - Nuclear Physics*3 Credits*

Nuclear structure, nuclear reactions, nuclear constituents, fundamentals of nuclear reactor theory and design, shielding and safety principles in nuclear physics. Offered alternate spring semesters. Course Attributes: Math\Natural Sciences.

PHYS 3411 - Optics*3 Credits*

Elements of geometrical optics; wave optics: interference, diffraction, polarization; Fourier optics; basics of coherence theory and properties of lasers; holography: theory and actual exposure of various types of holograms. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Math\Natural Sciences, Informed Responses-Aesthetics.

PHYS 3451 - Math Methods*3 Credits*

Mathematics applied to solving physical problems in electricity and magnetism, mechanics, quantum mechanics, optics. Vector analysis: gradient, divergence, curl; tensor analysis; determinants and matrices: eigenvalues and eigenvectors, diagonalization; series solutions of differential equations: Legendre equation, Hermite polynomials; Fourier series and transform. Offered alternate fall semesters. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Math\Natural Sciences.

PHYS 3471 - Introductory Astrophysics*3 Credits*

Physical nature of planets, stars, galaxies and the universe as a whole. Particle and wave properties of light and matter, the Bohr atom, and astronomical instrumentation. Offered alternate years. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Math\Natural Sciences.

PHYS 3511 - Solid State*3 Credits*

Basic elements of the physics of solids: the crystalline structure; thermal and electrical conductivity; semiconductors; magnetic properties of solids; superconductivity. Prerequisite(s): PHYS 3051. Course Attributes: Math\Natural Sciences.

PHYS 3531 - Statistical Mechanics*3 Credits*

Properties of gases, thermal properties of solids and liquids. Thermodynamic laws. Heat transfer. Kinetic thermodynamic laws. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Math\Natural Sciences.

PHYS 3551 - Electronics*3 Credits*

Theory of solid state devices, rectifier circuits, transistor amplifiers, oscillators and modulators, instrumentation applications. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Math\Natural Sciences.

PHYS 3571 - Computational Physics*3 Credits*

Methods and problems in computational physics. Prerequisite(s): PHYS 3451 and ECCS 4611. Course Attributes: Math\Natural Sciences.

PHYS 3731 - Analytical Mechanics*3 Credits*

Vector analysis, kinematics, conservative forces, planetary motion, pendulum, free and forced oscillations, coupled systems and normal coordinates, angular momentum, rigid bodies. Offered alternate fall semesters. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Math\Natural Sciences.

PHYS 3751 - Quantum Mechanics*3 Credits*

The mathematical language of quantum mechanics; the postulates of quantum mechanics; the one-dimensional Schrodinger equation; the 3-dimensional Schrodinger equation; the hydrogen atom; angular momentum; the interpretation of quantum mechanics. Offered alternate fall semesters. Prerequisite(s): PHYS 2121 or PHYS 2321. Course Attributes: Math\Natural Sciences.

PHYS 3901 - Special Topics in Physics*1 to 3 Credits*

This course may be repeated 4 times. This course is repeatable for a total of 6 hours.

PHYS 3951 - Independent Research*1 to 2 Credits Grading mode is S/U*

This course may be repeated 4 times. This course is repeatable for a total of 8 hours.

PHYS 4111 - Electricity and Magnetism 1*3 Credits*

Electrostatic field theory, capacitance, multipole expansion, dielectric properties of matter; magnetic field theory; electromagnetic induction; magnetic properties of matter; Maxwell's equations and electromagnetic waves. Offered alternate fall semesters. Prerequisite(s): PHYS 2321. Course Attributes: Math\Natural Sciences.

PHYS 4121 - Electricity and Magnetism 2*3 Credits*

Advanced electric and magnetic fields; electric and magnetic properties of solids, electromagnetic radiation. Offered alternate spring semesters. Prerequisite(s): PHYS 4111. Course Attributes: Math\Natural Sciences.

PHYS 4151 - Plasma Physics*3 Credits*

Single particle motions. Plasmas as fluids. Waves and wave formation in plasmas. Nonlinear effects in plasmas. Course Attributes: Math\Natural Sciences.

PHYS 4901 - Special Topics in Physics

1 to 3 Credits

Part of the Physics major program and offered when needed. This course may be repeated 4 times. This course is repeatable for a total of 6 hours.

PHYS 4931 - Independent Study

1 to 3 Credits

Individual study of topics in physics. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted.

PHYS 4951 - Senior Thesis Seminar

2 Credits

Written and oral presentation of the complete Capstone Research Project. The Research Project is written in the format of a scientific manuscript and presented during a formal seminar. This course will be the culmination of the Capstone experience. Prerequisite(s): PHYS 3951. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

PHYS 4971 - Independent Research

1 to 3 Credits Grading mode is S/U

Part of the Physics major program and offered when needed. This course may be repeated 4 times. This course is repeatable for a total of 8 hours.

DEPARTMENT OF PSYCHOLOGY, SOCIOLOGY AND CRIMINAL JUSTICE

Professors Cohoe, Durkin; **Associate Professors** Carrothers (*Chair*), Payment, Zoladz; **Assistant Professors** Johnson, Kilgallon, Kraynok; **Visiting Instructor** Brooks.

Mission Statement

The mission of the Department of Psychology, Sociology, and Criminal Justice is to provide students with an intellectual foundation in the theories that explain human behavior under both normal and abnormal conditions and clarify how pre-existing patterns of behavior shape human interaction. Students are taught to critically evaluate, theoretically analyze, and scientifically produce research findings about everyday life.

Majors, Minors and Degrees Offered

Criminal Justice Major (BA)

Forensic Science Option (BA)

Investigative Accounting Option (BA)

Law 3+3 in Psychology (BA)

Law 3+3 in Sociology (BA)

Psychology Major

Behavioral Neuroscience Concentration (BS)

Clinical and Counseling Psychology Concentration (BA, BS)

General Psychology Concentration (BA, BS)

Sociology Major

General Sociology Concentration (BA)

Social Services Administration Concentration (BA)

Criminal Justice Minor

Psychology Minor

Sociology Minor

Special Programs

Pre-Law Program

The Department of Psychology, Sociology and Criminal Justice participates in the 3+3 Law Admissions Program, so that students majoring in Psychology (BA) or Sociology may participate in the program. For more information, see the fuller description on page 22.

Honoraries and Organizations

Alpha Kappa Delta is the international honor society in sociology, founded in 1920. Membership in Alpha Kappa Delta is limited to those students with superior scholarship and serious interest in sociology who meet the criteria for membership. Alpha Kappa Delta derives its name from the first letters of three Greek words, which, when translated freely, express both the goal and the method of Alpha Kappa Delta: "To study humankind for the purpose of service."

Psi Chi, the international honor society in psychology, was founded in 1929 for the purpose of encouraging, stimulating and maintaining excellence in scholarship and advancing the science of psychology. Membership in the society is selective and based on high academic performance.

Alpha Phi Sigma is the national criminal justice honorary. The goals of Alpha Phi Sigma are to honor and promote academic excellence, community service; educational leadership and unity. Alpha Phi Sigma is the only criminal justice honor society which is a certified member of The Association of College Honor Societies and affiliated with The Academy of Criminal Justice Sciences. Membership in the honorary recognizes academic excellence of undergraduate and graduate students of criminal justice, as well as Juris Doctorate students.

Psi Sigma is a student organization open to all students with an interest in either psychology, sociology, or criminal justice. The club sponsors speakers and fundraisers for community organizations.

Internships and Research

Students majoring in psychology, sociology, and criminal justice have the opportunity to pursue internships and research. Psychology internships may include anything from experience with childhood development to experience with clinical and/or counseling psychologists. Sociology majors may pursue internship opportunities at various social service agencies. Criminal Justice students have a required public service internship that can be served in a variety of agencies related to the field. Students might also gain research experience by working closely with a specific faculty member to conduct empirical investigations in various areas of psychological, sociological, or criminological inquiry.

Major Course Requirements

All required courses, both in and outside of the major subject area must be completed with a grade of 'C' or higher.

Criminal Justice Major (58 credit hours)

Criminal justice prepares students for careers in law enforcement, corrections, probation and parole, juvenile justice, crime analysis, and courts administrations. A highly interdisciplinary major, criminal justice focuses on the political, administrative, sociological, and psychological aspects of crime and the criminal justice system. Students may also pursue course work in forensic science offered in cooperation with the Department of Biological and Allied Health Sciences or in forensic accounting offered in cooperation with Dicke College of Business Administration. All criminal justice majors must complete an internship.

CJ 1211	Introduction to Criminal Justice (3)
CJ 2001	CJ Systems: The Police (3)
CJ 2101	CJ Systems: The Courts (3)
CJ 2201	CJ Systems: Corrections (3)
CJ 3xx1/4xx1	CJ elective ^{1,2} (3)
CJ 3xx1/4xx1	CJ elective ^{1,2} (3)
CJ 3xx1/4xx1	CJ elective ^{1,2} (3)
CJ 4711	Public Service Internship ² (3)
CJ 4981	Senior Thesis 1 (1)
CJ 4991	Senior Thesis 2 (2)

Other required courses

GEOG 2481	Introduction to GIS (3)
ISR 2531	Research Methods (3)
ISR 2541	Data Analysis (4)
PLSC 1011	American Politics (3)
	or
PLSC 3011	State and Local Politics (3)
PSYC 1001	Psychology (3)
SOC 1051	Sociology (3)
SOC 2611	Criminology (3)
STAT 1561	Statistics For Professionals 1 (3)

Complete two departmentally approved, major-appropriate courses from the following

PLSC 3xx1/4xx1	PLSC elective (3)
PSYC 3xx1/4xx1	PSYC elective (3)
SOC 3xx1/4xx1	SOC elective (3)

¹Weekend Seminar (CJ 3021) is a 1-credit hour course that students may repeat as the topic varies. The student may apply exactly 3 credit hours of CJ 3021 to CJ elective credit. The student may apply exactly 3 credit hours of PLSC 4761 to CJ elective credit.

²The criminal justice major requires a total of 600 on-site hours of Public Service Internship (CJ 4711). The student must enroll in at least 1 credit hour of Public Service Internship for each internship experience. The student may apply exactly 3 credit hours of CJ 4711 to CJ elective credit upon the approval of the Internship Committee.

Forensic Science Option (33 credit hours)

Only criminal justice majors may declare the forensic science option. Every course required for this option must be completed with a grade of "C" or higher.

BIOL 1311	Biology 1: Cells and Molecules (4)
BIOL 1321	Biology 2: Form and Function (4)
BIOL 2101	Genetics (4)
BIOL 2171	Molecular Biology (3)
BIOL 2191	Forensic Biology 1 (4)
BIOL 2311	Anatomy and Physiology 1 (3)
BIOL 2591	Forensic Crime Scene Investigation (4)
BIOL 3521	Integrated Cell and Molecular Biology Laboratory (2)
CHEM 1201	Chemistry - Health Sciences (5)

Investigative Accounting Option (18 credit hours)

Only criminal justice majors may declare the forensic accounting option. Every course required for this option must be completed with a grade of "C" or higher.

BIZ 2101	Accounting Foundations for Business Planning (3)
ACCT 2201	Accounting Foundations 2 (3)
ACCT 3011	Intermediate Financial Accounting 1 (3)
ACCT 3021	Intermediate Financial Accounting 2 (3)
ACCT 3031	Auditing 1 (3)
ACCT 3871	Taxation 1 (3)

Psychology Major (39-41 credit hours)

Psychology majors must complete one of three concentrations: behavioral neuroscience, clinical and counseling psychology, or general psychology. Each concentration has been designed to prepare students for graduate study in general psychology or specific subfields within the discipline. The 39-41 credit hours listed below include 16 credit hours of common courses plus 25 credit hours for the behavioral neuroscience concentration, 23 credit hours for the clinical and counseling psychology concentration, and 23 credit hours for the general psychology concentration.

PSYC 1001	Psychology (3)
PSYC 2401	Statistics for the Behavioral Sciences (3)
PSYC 3401	Experimental Psychology with Lab (4)
PSYC 4951	Senior Capstone in Psychology I (1)
PSYC 4961	Senior Capstone in Psychology II (1)

Other required courses

BIOL 1201	Introductory Biology (4) - for General Psychology and Clinical Counseling
	or
BIOL 1311	Biology 1: Cells & Molecules (4) - for Behavioral Neuroscience

Behavioral Neuroscience Concentration (25 credit hours)

The behavioral neuroscience concentration is designed to prepare students for graduate study in physiological psychology, behavioral neuroscience or neuropsychology.

Complete the following five courses:

PSYC 3151	Learning and Behavior with Lab (4)
PSYC 3251	Cognitive Psychology with Lab (4)
PSYC 3301	Sensation and Perception with Lab (4)
PSYC 3351	Physiological Psychology with Lab (4)
PSYC 4351	Psychopharmacology (3)

Complete at least one elective from each of the following two categories:

Developmental Aspects of Psychology:	
PSYC 2161 ¹	Child Psychology (3)
PSYC 2171 ¹	Adolescent Psychology (3)

Clinical and Social Aspects of Psychology:	
PSYC 4201	Abnormal Psychology (3)
PSYC 3011	Social Psychology (3)
PSYC 3111	Psychology of Personality (3)

Clinical and Counseling Psychology Concentration (23 credit hours)

The clinical and counseling psychology concentration is designed to prepare students for immediate entry into the workforce or graduate study in clinical or counseling psychology.

Complete the following four courses:	
PSYC 3131	Introduction to Clinical (3)
PSYC 4201	Abnormal Psychology (3)
PSYC 3111	Psychology of Personality (3)
PSYC 3121	Psychological Assessment (3)

Complete at least one elective from each of the following three categories:

Physiological Aspects of Psychology:	
PSYC 3301	Sensation and Perception with Lab (4)
PSYC 3351	Physiological Psychology with Lab (4)

Cognitive Aspects of Psychology:

PSYC 3151	Learning and Behavior with Lab (4)
PSYC 3251	Cognitive Psychology with Lab (4)

Developmental Aspects of Psychology:

PSYC 2161 ¹	Child Psychology (3)
PSYC 2171 ¹	Adolescent Psychology (3)

General Psychology Concentration (23 credit hours)

The general psychology concentration is designed to prepare students for immediate entry into the workforce or graduate study in most subdisciplines of experimental psychology.

Complete three (3) three-credit Psychology electives (PSYC) at the 2000-, 3000- or 4000-level (9 credits).

Complete at least one elective from each of the following four categories:

Physiological Aspects of Psychology:	
PSYC 3301	Sensation and Perception with Lab (4)
PSYC 3351	Physiological Psychology with Lab (4)

Cognitive Aspects of Psychology:

PSYC 3151	Learning and Behavior with Lab (4)
PSYC 3251	Cognitive Psychology with Lab (4)

Developmental Aspects of Psychology:

PSYC 2161 ¹	Child Psychology (3)
PSYC 2171 ¹	Adolescent Psychology (3)

Clinical and Social Aspects of Psychology:

PSYC 4201	Abnormal Psychology (3)
PSYC 3011	Social Psychology (3)
PSYC 3111	Psychology of Personality (3)

Sociology Major (40 credit hours)

Sociology majors must complete a core set of courses covering research methodology, data analysis, and sociological theory as well as a series of elective courses covering areas such as criminology, social psychology, social stratification, and medical sociology. These degree requirements prepare students for graduate work in sociology and related fields, as well as entry into the job market.

Sociology majors will enroll in either the general sociology concentration or the social services administration concentration.

General Sociology Concentration (40 credit hours)

The general sociology concentration is designed to prepare students for immediate entry into the workforce or graduate study by providing a broad survey of the discipline.

SOC 1001	Introduction to Sociology (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 4461 ⁴	Classical Sociological Theory (3)
SOC 4471 ⁴	Contemporary Sociological Theory (3)
SOC 4881	Senior Capstone Research 1 (1)
SOC 4891	Senior Capstone Research 2 (2)

Other required courses

ISR 2531	Research Methods (3)
ISR 2541	Data Analysis (4)
STAT 1561	Statistics For Professionals 1 (3)

Social Service Administration Concentration (40 hours)

Students in the Social Services Administration concentration will complete the equivalent of three years of study at ONU including 92 credit hours of coursework, 40 hours of coursework within the SSA concentration, all distributional requirements of the Getty College of Arts & Sciences, and 15 artifacts toward the completion of the ONU general education requirements.

At the completion of the three years of study at ONU the student may transition into the Masters of Science in Social Administration program at Case Western Reserve University assuming they have met the requirements set forth by CWRU and are accepted into the program. The fourth and fifth years of study are completed at CWRU.

SOC 1001	Introduction to Sociology (3)
PSYC 1001	Introduction to Psychology (3)
STAT 1561	Statistics For Professionals 1 (3)
ISR 2531	Research Methods 1 (3)
ISR 2541	Data Analysis (4)
SOC 4461	Classical Sociological Theory (3)
SOC 4881	Senior Capstone Research 1 (1)
SOC 4891	Senior Capstone Research 2 (2)

Students will take four (4) of the following sociology courses

If a student declares the SSA later in the academic career, no adjustments will be made to the SSA curriculum.

If a student decides, upon completion of the SSA requirements at ONU, that they do not wish to complete the MSSA, do not want to continue their graduate work at CWRU, or is not accepted by CWRU for graduate study, the student will transition to the general sociology concentration and complete the degree requirements as established.

If a student is unable to complete the MSSA program at CWRU, a review of the coursework finished at CWRU will be completed to determine if the student has completed appropriate requirements for an ONU degree. The student may be required to return to ONU to complete degree requirements for the general sociology concentration.

SOC 2401	Sociology of the Family (3)
SOC 2431	Deviant Behavior (3)
SOC 2501	Cultural Anthropology (3)
SOC 2601	Social Problems (3)
SOC 2611	Criminology (3)
SOC 2631	Victimology (3)
SOC 3461	Social Stratification (3)
SOC 3471	Race, Class, Gender (3)
SOC 3481	Sociology of Health and Health Care (3)
SOC 3491	Sociology of Mental Health and Illness (3)
SOC 3551	Advanced Data Analysis (3)
SOC 3611	Delinquency and Juvenile Justice (3)
SOC 3631-	Sociology of Substance Abuse (3)

Students will select two (2) of the following psychology courses	
PSYC 2161/2171	Child Psychology or Adolescent Psychology (3)
PSYC 3131	Introduction to Clinical (3)
PSYC 2101	Motivation and Emotion (3)
PSYC 2201	Health Psychology (3)
PSYC 3011	Social Psychology (3)
PSYC 3121	Psychological Assessment (3)

Minor Course Requirements

All courses required for a minor must be completed with a grade of 'C' or higher.

Criminal Justice Minor (24 credit hours)

CJ 1211	Introduction to Criminal Justice (3)
CJ 2001	CJ Systems: The Police (3)
CJ 2101	CJ Systems: Corrections (3)
GEOG 2481	Introduction to GIS (3)
SOC 1051	Sociology (3)
SOC 2611	Criminology (3)
STAT 1561	Statistics For Professionals 1 (3)
PLSC 3541	Judicial Process, Behavior, and Impact (3)

Psychology Minor (19 credit hours)

PSYC 1001	Psychology (3)
PSYC 2xx1-4xx1 ²	Psychology electives (3)
PSYC 2xx1-4xx1 ²	Psychology electives (3)

Complete at least one elective from each of the following three categories:

Cognitive and Physiological Aspects of Psychology:

PSYC 3151	Learning and Behavior with Lab (4)
PSYC 3251	Cognitive Psychology with Lab (4)
PSYC 3301	Sensation and Perception with Lab (4)
PSYC 3351	Physiological Psychology with Lab (4)

Developmental Aspects of Psychology:

PSYC 2161 ¹	Child Psychology (3)
PSYC 2171 ¹	Adolescent Psychology (3)

Clinical and Social Aspects of Psychology:

PSYC 4201	Abnormal Psychology (3)
PSYC 3011	Social Psychology (3)
PSYC 3111	Psychology of Personality (3)

Sociology Minor (28 credit hours)

SOC 1001	Introduction to Sociology (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 2xx1-4xx1 ³	Sociology electives (3)
SOC 4461	Classical Sociological Theory (3)

Other required courses

ISR 2531	Research Methods (3)
ISR 2541	Data Analysis (4)
STAT 1561	Statistics For Professionals 1 (3)

Notes:

¹Development across the Lifespan (PSYC 2151) is designed for non-psychology majors. Psychology majors who are interested in developmental psychology should take courses within the developmental sequence (PSYC 2161, PSYC 2171). Students taking PSYC 2151 should not take PSYC 2161 or PSYC 2171 and vice-versa.

²Students may take an unlimited number of PSYC 4261 and 4271 credits. However, a maximum of 3 of these credits may be used as the equivalent of a psychology elective, and only 9 credits from these courses can be applied toward graduation.

³Students may take an unlimited number of SOC 4811, 4881, 4891 and 4981 credits. However, a maximum of 3 of these credits may be used as the equivalent of a sociology elective, and only 9 credits from these courses can be applied toward graduation.

Subject - Criminal Justice (CJ)

CJ 1211 - Introduction To Criminal Justice

3 Credits

Concepts, issues, substance, structures of the American criminal justice system, causes of criminal behavior, theories of law and punishment, and the roles of various actors within the system. Course Attributes: Social Science, Critical and Creative Thinking, Effective Communication Non-Writing.

CJ 2001 - Criminal Justice Systems: The Police

3 Credits

Historical, philosophical and legal basis of police institutions, practices and procedures. Issue oriented course. Discussion topics will vary with prevailing policing issues. Course Attributes: Social Science.

CJ 2101 - Criminal Justice Systems: The Courts

3 Credits

Prosecution and defense in criminal cases. Constitutional rules that apply to criminal cases at trial and under appeal. The concept of due process. The rights and limitations of the state and the defense under the Bill of Rights. Preliminary hearings, arraignment, trials, sentencing, and appeals. Course Attributes: Social Science.

CJ 2201 - Criminal Justice Systems: Corrections

3 Credits

Historical, philosophical and legal basis of correctional procedures and institutions. Probation and parole. Issue oriented course. Discussion topics will vary with prevailing corrections issues. Course Attributes: Social Science.

CJ 3021 - Nature Center Seminar In Criminal Justice

1 Credit

Weekend seminar at the Metzger Nature Center on a wide range of topics in criminal justice. May be repeated as topic varies. A Nature Center use fee is charged. Unlimited repeats permitted.

CJ 3401 - Comparative Criminal Justice

3 Credits

Comparison of the American criminal justice system with international systems from the common, civil, socialist, and Islamic legal traditions. Comparative analysis of police, courts, corrections, and legal definitions of crime. Transnational crime. Course Attributes: Social Science, Critical and Creative Thinking, Effective Communication Non-Writing.

CJ 3431 - Substantive Criminal Law

3 Credits

Law as a method of social control. The nature, sources, and types of criminal law. History and theories of criminal law. Behavioral and legal aspects of criminal acts. Classification and analysis of selected criminal offenses. Common law doctrine, statutory reform, and constitutional law that affect the substantive criminal law. Course Attributes: Social Science.

CJ 3541 - Women In Criminal Justice

3 Credits

Women in the American criminal justice system. Women as offenders, victims of crime, and criminal justice professionals. Feminist theories of criminology. Impact of sexism, prejudice, and discrimination. Course Attributes: Social Science, Diversity-Human Interaction.

CJ 3551 - Minorities In Criminal Justice

3 Credits

Racial and ethnic minorities in the American criminal justice system. Minority and ethnic group members as offenders, victims of crime, and criminal justice professionals. Impact of racism, prejudice, and discrimination. Course Attributes: Social Science, Critical and Creative Thinking, Diversity-Human Interaction.

CJ 3561 - Juvenile Justice

3 Credits

Operations of the American juvenile justice system. The history of juvenile delinquency and the evolution of the juvenile justice system. Police treatment of juveniles, juvenile rights, juvenile court procedures, treatment and punishment of juvenile offenders. Prevention of juvenile delinquency. Course Attributes: Social Science, Diversity-Human Interaction.

CJ 3601 - Criminal Investigation

3 Credits

Principles and theories of criminal investigative procedure. Organizing and managing investigations. Techniques for collecting, evaluating, and preserving evidence. Interrogation and arrest of suspects. Effective report writing and trial preparation. Course Attributes: Social Science.

CJ 3901 - Special Topics In Criminal Justice

3 Credits

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Social Science.

CJ 4011 - The Death Penalty

3 Credits

Examination of the Eighth Amendment and the death penalty. Major United States Supreme Court decisions that relate to the death penalty. Theoretical and practical perspectives on the death penalty. Historical development of the death penalty. Capital trials, the appeals process, methods of execution, and the doctrine of proportionality. Comparisons between male and female capital offenders. Rules that govern insane and juvenile capital offenders. The costs of executions. Course Attributes: Social Science.

CJ 4101 - Criminal Behavior

3 Credits

Use of the descriptions and explanations that criminals themselves provide to understand how people become criminals. The roles that social and peer groups, social environment, and learning play in the process. Theoretical and policy implications of criminal behavior. Course Attributes: Social Science, Diversity-Human Interaction.

CJ 4111 - Serial Killers

3 Credits

The historical origins of the concept of serial killers. The methods, motives, and psychological background of American serial killers. The culture of serial killers. Theories to explain serial killing. The concept and application of profiling. Course Attributes: Social Science.

CJ 4121 - Domestic Violence

3 Credits

Definitions and causes of domestic violence. The evolution of social and legal responses to domestic violence. Types of domestic violence and the experiences of victims. Prevention of domestic abuse. Course Attributes: Social Science, Critical and Creative Thinking.

CJ 4211 - Crime And The Media

3 Credits

Representations of crime and the criminal justice system in the media. How media representations affect society and the criminal justice system. How the media construct reality, influence attitudes and perceptions of crime and criminality, and affect criminal cases. Course Attributes: Social Science.

CJ 4621 - Issues In Criminal Justice

3 Credits

Intensive study of selected topics related to criminal justice. May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Social Science.

CJ 4711 - Public Service Internship Program

1 to 15 Credits

Field experience in the area of public service. Student works in a close relationship with public offices and officials or approved private agencies and firms. Student must enroll in at least 1 credit hour of Public Service Internship per internship experience. A full time Public Service Internship requires 600 hours of on-site work. Student may apply up to 15 credit hours of departmental internship to the BA degree. Consultation with the department internship committee and completion of the application process; 2.75 GPA. Must be enrolled in one of the following Classifications: Junior, Senior. This course is repeatable for a total of 15 hours.

CJ 4721 - Seminar - The Washington Center Seminar

3 Credits

Course Attributes: Social Science, Requires Department Approval.

CJ 4901 - Special Topics In Criminal Justice*3 Credits*

May be repeated as topic varies. Formerly PLSC 490. Unlimited repeats permitted. Course Attributes: Social Science.

CJ 4941 - Seminar In Criminal Justice*3 Credits*

May be repeated as topic varies. Unlimited repeats permitted. Course Attributes: Social Science.

CJ 4961 - Independent Study In Criminal Justice*1 to 3 Credits*

Unlimited repeats permitted. Course Attributes: Requires Department Approval.

CJ 4981 - Senior Thesis 1*1 Credit*

Topic selection and development of bibliography and outline for senior thesis under the direction of a departmental faculty member. First part of departmental Capstone course for majors in Criminal Justice. Required of all Criminal Justice majors. Enrollment at least two semesters before the semester of expected graduation. Formerly PLSC 488. Prerequisite(s): (ISR 2531 Minimum Grade of C or ISR 253 Minimum Grade of C) and (ISR 2541 Minimum Grade of C or ISR 254 Minimum Grade of C). Must be enrolled in one of the following Fields of Study: Criminal Justice. Must be enrolled in one of the following Classifications: Junior, Senior.

CJ 4991 - Senior Thesis 2*2 Credits*

Completion of senior thesis under the direction of a departmental faculty member and a second reader. Second part of departmental Capstone course for majors in Criminal Justice. Required of all Criminal Justice majors. Enrollment at least one semester before the semester of expected graduation. Prerequisite(s): CJ 4981 Minimum Grade of C or PLSC 488 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Criminal Justice. Must be enrolled in one of the following Classifications: Junior, Senior.

Subject - Psychology (PSYC)**PSYC 1001 - Psychology***3 Credits*

Introduction to the scientific approach to understanding human behavior and mental processes. Topics may include human development, learning and memory, personality, social and environmental factors, biological aspects of behavior, the experience of emotion and psychological disorders. Offered fall and spring semesters. Course Attributes: Social Science, Critical and Creative Thinking.

PSYC 2101 - Motivation and Emotion*3 Credits*

Examination of how motivational factors, including emotion, affect the behavior of human and non-human organisms. Theoretical and empirical evidence addressing the biological, behavioral and mental events that trigger and direct behavior will be covered. Offered alternate fall semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science, Effective Communication Writing, Integration Across Disciplines.

PSYC 2151 - Development across the Lifespan*3 Credits*

Basic theories in human development from conception through old age using a biopsychosocial model; contemporary research at each age level. Offered fall and spring semesters. May not be enrolled in one of the following Major fields of study: Psychology. Course Attributes: Social Science, Critical and Creative Thinking.

PSYC 2161 - Child Psychology*3 Credits*

Survey of the basic theories and research relative to human growth and development from conception through late childhood with an emphasis on the physiological, cognitive, socioemotional and cultural changes associated with human life. Offered spring semester. Prerequisite(s): PSYC 1001 Minimum Grade of C or PSYC 100 Minimum Grade of C. Course Attributes: Social Science.

PSYC 2171 - Adolescent Psychology*3 Credits*

Survey of the basic theories and research relative to human growth and development from preadolescence through young adulthood with an emphasis on the physiological, cognitive, socioemotional and cultural changes associated with human life. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 2201 - Health Psychology*3 Credits*

Examination health using a bio-psycho-social model and investigation of the relation between psychology, health-promoting behaviors, wellness, sickness, and the health care system. Offered alternate spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science, Integration Across Disciplines.

PSYC 2401 - Statistics for the Behavioral Sciences*3 Credits*

Provides an introduction to statistical methods in the behavioral sciences and stresses understanding when and why certain statistical procedures are used. Topics include descriptive and inferential statistics, including measures of central tendency and dispersion, correlation, hypothesis testing, t-tests, analysis of variance, and chi square. This course may be used to fulfill a math/stat distributional requirement. Offered fall semester. Prerequisite(s): PSYC 1001 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Psychology. Course Attributes: Social Science, Scientific and Quantitative Literacy.

PSYC 2901 - Special Topics in Psychology*3 Credits*

Coverage of special topics in psychology. This course may be repeated as topic changes. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Unlimited repeats permitted. Course Attributes: Social Science.

PSYC 2921 - Topics in Psychology*3 Credits*

Coverage of topics in psychology. This course may be repeated as topic changes. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Unlimited repeats permitted. Course Attributes: Social Science.

PSYC 3011 - Social Psychology*3 Credits*

The effects of social and cultural forces upon the individual. The nature and development of attitudes and cognitive processes. Individual and group projects illustrative of the methodology of social psychology. Offered fall semester. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 3111 - Psychology of Personality*3 Credits*

The major theories of personality from Freud to contemporary theoretical approaches. Offered alternate fall semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 3121 - Psychological Assessment*3 Credits*

Psychological measurement and evaluation in the areas of intelligence tests, tests of separate abilities, and personality inventories. Experience will be gained in test administration, scoring and interpretation. Offered spring semester. Prerequisite(s): PSYC 1001 Minimum Grade of C. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Social Science.

PSYC 3131 - Introduction to Clinical Psychology*3 Credits*

An introduction to the discipline of clinical psychology and clinical science, including an overview of sub-disciplines, exposure to clinical skills, and a review of pertinent clinical literature. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 3151 - Learning and Behavior with Lab

4 Credits

The major theories and empirical issues related to common forms of learning, such as classical and instrumental conditioning. Current research in learning is covered on both the human and non-human animal level. Laboratory component involves application of learning principles to modify the behavior of organisms. Offered fall semester. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 3171 - Adulthood and Aging

3 Credits

Survey of the basic theories and research relative to human growth and development from mid-life through late life with an emphasis on the physiological, cognitive, socioemotional, and cultural changes and differences associated with human life. Offered alternate fall semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 3201 - Psychology and the Law

3 Credits

A review of the role of the psychologist in civil commitment procedures, the insanity defense, patient's rights, the determination of competency and testifying as an expert witness. An examination of significant course cases involving psychology and the law, research in the areas of jury selection, eye witness testimony and psychologists' licensing procedures. Offered alternate fall semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 3251 - Cognitive Psychology with Lab

4 Credits

An introduction to the complex system of mental abilities. Theoretical and empirical approaches to the role of pattern recognition, attention, memory, problem-solving and decision making in human thinking will be explored. Laboratory component involves participation in experiments designed to facilitate student understanding of cognition phenomena. Offered spring semester. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 3301 - Sensation and Perception with Lab

4 Credits

Biological and psychological mechanisms responsible for internalizing the external world. In-depth discussion of the relationship between physical and psychological events based on theoretical and empirical evidence. Laboratory component will use laboratory techniques to illustrate the biological and psychological mechanisms underlying sensation and perception. Offered alternate fall semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 3351 - Physiological Psychology with Lab

4 Credits

Psychology as a biological science. Physiological events underlying behavior, including sensory, neural, and glandular involvement in such topics as motivation, emotion, and learning. Laboratory component involves dissections and experiments used to illustrate the role of biological processes in behavior. Offered spring semester. Prerequisite(s): PSYC 1001 Minimum Grade of C and (BIOL 1201 Minimum Grade of C or BIOL 1311 Minimum Grade of C). Course Attributes: Social Science.

PSYC 3401 - Experimental Psychology with Lab

4 Credits

The logic of experimental research and the application of the methods of science to the study of behavior. Particular emphasis on framing empirically testable hypotheses, experimental design, and analysis of data. Extensive instruction in scientific communication and the APA Publications Manual. Laboratory component involves use of computer simulation and research experience to facilitate student understanding of the processes involved in empirical psychological investigations. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C and PSYC 2401 Minimum Grade of C. Course Attributes: Social Science, Effective Communication Non-Writing, Scientific and Quantitative Literacy.

PSYC 3901 - Special Topics in Psychology

3 Credits

Coverage of special topics in psychology. This course may be repeated as topic changes. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Unlimited repeats permitted. Course Attributes: Social Science.

PSYC 3921 - Topics in Psychology

3 Credits

Coverage of topics in psychology. This course may be repeated as topic changes. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Unlimited repeats permitted. Course Attributes: Social Science.

PSYC 4201 - Abnormal Psychology

3 Credits

The development of a scientific approach to abnormal behavior. A review of the psychological, sociological, and biological factors related to the development of abnormal behavior. A review of the research of, the causal factors related to, and the diagnosis and treatment of mental disorders and mental retardation. Offered spring semester. Prerequisite(s): PSYC 1001 Minimum Grade of C. Course Attributes: Social Science.

PSYC 4261 - Internship Practicum in Psychology

1 to 12 Credits Grading mode is S/U

A field experience in the area of psychology. Only 3 practicum credits may be applied to the major. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. This course may be repeated 1 time.

PSYC 4271 - Research Practicum in Psychology

1 to 12 Credits

A research experience in the field of psychology supervised by a faculty member. Only 3 research practicum credits may be applied to the major. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Unlimited repeats permitted.

PSYC 4281 - Teaching Practicum in Psychology

1 to 4 Credits

A mentoring experience in conducting undergraduate psychology laboratories. Practicum students work with a supervising professor in preparation and presentation of instruction and laboratory exercises and providing feedback to students. Ethical, organizational and practical issues will be discussed. Only 3 practicum credits may be applied to the major. Offered fall and spring semesters. Prerequisite(s): PSYC 3401 Minimum Grade of B. This course may be repeated 2 times. This course is repeatable for a total of 8 hours. Course Attributes: Social Science.

PSYC 4351 - Psychopharmacology

3 Credits

An advanced examination of pharmacological agents and their effects on neuronal function, with a particular emphasis on the alteration of behavioral states. Major drug classes, their pharmacological properties and their use to treat various psychological disorders will be covered. Offered alternate fall semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C and (BIOL 1201 Minimum Grade of C or BIOL 1311 Minimum Grade of C). Course Attributes: Social Science, Critical and Creative Thinking, Effective Communication Non-Writing, Scientific and Quantitative Literacy.

PSYC 4901 - Special Topics in Psychology

3 Credits

Coverage of special topics in psychology. This course may be repeated as topic changes. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Unlimited repeats permitted. Course Attributes: Social Science.

PSYC 4921 - Topics in Psychology

3 Credits

Coverage of topics in psychology. This course may be repeated as topic changes. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Unlimited repeats permitted. Course Attributes: Social Science.

PSYC 4951 - Senior Capstone in Psychology I

1 Credit

Use of developed skills in the field of psychology to prepare students for graduate studies in psychology or careers in psychology. Students will be exposed to the Psychology GRE subject test, graduate school interview process, preparation of a curriculum vitae, preparation of a personal statement, reviewing psychological journal articles, and preparation of literature review or experimental study proposal. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Effective Communication Writing.

PSYC 4961 - Senior Capstone in Psychology II*1 Credit*

Continuation of PSYC 4951. Offered fall and spring semesters. Prerequisite(s): PSYC 1001 Minimum Grade of C and PSYC 3401 Minimum Grade of C and PSYC 4951 Minimum Grade of C. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking.

PSYC 4971 - Independent Study in Psychology*1 to 4 Credits*

Offered fall and spring semesters. This course may be repeated 1 time.

Subject - Sociology (SOC)**SOC 1001 - Introduction to Sociology***3 Credits*

The basic phenomena and processes of social life: culture, socialization, deviance, social institutions (family, economy, education, religion, military), bureaucratization, collective behavior, social inequality, race, ethnicity, class, gender, and sexuality. Analysis of the interplay between the person and social groups. Offered fall and spring semesters. Course Attributes: Social Science, Diversity-Human Interaction.

SOC 2301 - Sociology of Religion*3 Credits*

Survey of the sociological study of religion as a social institution within a social system. Trends and patterns of individual, group, and organizational religious behavior are assessed using critical and empirical analysis, sociological theories, ideas and concepts. Offered alternate spring semesters. Course Attributes: Social Science, Integration Across Disciplines.

SOC 2401 - Sociology of the Family*3 Credits*

Historical, cross cultural, and analytical study of family with emphasis on ideology and the effects of social structures and agencies on family composition and roles. Offered spring semester. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Social Science, Critical and Creative Thinking.

SOC 2431 - Deviant Behavior*3 Credits*

Sociological perspectives on the processes of individual and group deviance. An examination of how deviant behavior is defined, how the definitions are maintained, and how the violators are processed. Theory and research regarding specific classes of deviants are explored, and current public policy issues concerning deviants are discussed. Offered alternate fall semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Social Science.

SOC 2501 - Cultural Anthropology*3 Credits*

The major concepts and principles of cultural anthropology, emphasizing the understanding of the total configuration and interrelationships of culture traits, complexes, and social relationships in a particular geographic environment and historical context. Offered fall and spring semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Non Western Cultural, Social Science, Diversity-Human Interaction.

SOC 2601 - Social Problems*3 Credits*

Sociological perspectives on contemporary problems and the process by which these issues come to be socially constructed as problems. Offered alternate spring semesters. Course Attributes: Social Science, Informed Ethical Responses.

SOC 2611 - Criminology*3 Credits*

The nature and extent of crime, development of criminological theory, major forms of criminal behavior, and society's attempts at prevention and control of crime. The major perspectives, issues and diverse concerns that characterize contemporary criminology are presented. Offered fall semester. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Social Science.

SOC 2631 - Victimology*3 Credits*

The history of victimology, patterns of victimization, the role of the victim in crime, the victim in the criminal justice system (including jury perceptions of victims), victim assistance programs, and victim/offender reconciliation programs. Offered alternate fall semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Social Science.

SOC 2901 - Special Topics*3 Credits*

Coverage of topics in sociology. Offered fall and spring semesters. Unlimited repeats permitted.

SOC 3461 - Social Stratification*3 Credits*

The origins, institutionalization and change of class, status, prestige, power, and other forms of social inequality with attention to the effects of stratification on the individual. Offered alternate fall semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Social Science, Diversity-Human Interaction.

SOC 3471 - Race, Class, and Gender*3 Credits*

Analysis of the structural interplay and social ramifications of race, social class, and gender. The course focuses on power relationships, intra and intergroup conflict, and minority relations. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Social Science, Diversity-Human Interaction.

SOC 3481 - Sociology of Health and Health Care*3 Credits*

This course introduces students to the social dimensions of health, illness, and health care. The sociology of health and health care, often referred to as medical sociology, examines a broad range of topics relevant to those in many fields of study. These topics include the social distribution of disease, social stress, health and illness behaviors, medical professions, the doctor-patient relationship, and health care systems. Offered alternate fall semesters. Course Attributes: Social Science.

SOC 3491 - Sociology of Mental Health and Illness*3 Credits*

Sociological perspectives on the definition, causes, patterning, and responses to mental health and illness. Topics include sociological (versus psychological or biological) theories of mental health and illness, the stress process, and the differential distribution of mental health and illness by race/ethnicity, gender, socioeconomic status, age, and marital status. Also covers the labeling or social construction of mental illness, as well as how society and various social institutions respond to those in need of treatment. Offered alternate spring semesters. Course Attributes: Social Science.

SOC 3501 - Self and Identity*3 Credits*

The theories of and research done on the self, self-concept, and identities in humans from both sociological and psychological perspectives. Offered alternate fall semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Social Science.

SOC 3551 - Advanced Data Analysis*3 Credits*

Multivariate statistical procedures, including measures of association for nominal and ordinal variables as well as correlation. Simple, multiple and logistic regression. Cleaning data, and construction of and evaluation of measurement scales. Involves the use of statistical software. Prerequisite(s): ISR 2541 Minimum Grade of C or PSYC 3401 Minimum Grade of C. Course Attributes: Social Science.

SOC 3611 - Delinquency & Juvenile Justice*3 Credits*

An analysis of competing theoretical approaches to the causes of delinquent behavior, and the study of the prevention, treatment, and control of delinquency. Procedures and major contemporary issues in Juvenile Justice are addressed. Offered alternate fall semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. Course Attributes: Social Science.

SOC 3621 - Occupational Crime & Deviance*3 Credits*

The various forms of criminal and deviant behavior that occur in the occupational context. A discussion of the natures, extent, consequences, and strategies to control this behavior. Major theoretical perspectives on occupational crime and deviance are considered. Topics covered include: white-collar crime, organized crime, employee theft, career criminality, and workplace violence. Offered alternate spring semesters. Course Attributes: Social Science.

SOC 3631 - Sociology of Substance Abuse*3 Credits*

The nature and extent of substance abuse in the United States. Correlates and consequences of substance use. Sociological and sociopsychological theories of substance abuse. Strategies for dealing with the problem of substance abuse (e.g., prevention, treatment, education, public policy). Offered alternate spring semesters. Course Attributes: Social Science.

SOC 3901 - Special Topics in Sociology*3 Credits*

Coverage of topics in sociology. Offered fall and spring semesters. Unlimited repeats permitted.

SOC 4461 - Classical Sociological Theory*3 Credits*

Traces sociological theorizing from sociology's historical origins. Major theorists covered include Marx, Durkheim, Weber and Chicago School sociologists. Emphasis on building an understanding of the roots of contemporary social theory. Senior or Junior status. Offered fall semester. Prerequisite(s): SOC 1001 Minimum Grade of C. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Social Science, Critical and Creative Thinking, Effective Communication Writing.

SOC 4471 - Contemporary Sociological Theory*3 Credits*

The major sociological theories developed since 1950. An examination of the critical debates in contemporary social theory. Senior or Junior status. Offered spring semester. Prerequisite(s): SOC 1001 Minimum Grade of C or SOC 105 Minimum Grade of C. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Social Science, Critical and Creative Thinking, Effective Communication Writing.

SOC 4811 - Sociology Internship*1 to 12 Credits*

Supervised field placement which involves work experience related to sociology or criminal justice or work experience on a specified external research project. Only 3 internship hours may be applied to the major. Offered fall and spring semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Requires Department Approval.

SOC 4821 - Research Practicum in Sociology*1 to 12 Credits*

A research experience in the field of sociology supervised by a faculty member. Only 3 research practicum credits may be applied to the major. Offered fall and spring semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. This course is repeatable for a total of 3 hours. Course Attributes: Requires Department Approval.

SOC 4831 - Teaching Practicum in Sociology*1 to 12 Credits*

A mentoring experience in instruction of undergraduates. Practicum students work with a supervising professor in preparation and presentation of instruction and course exercises and providing feedback to students. Ethical, organizational, and practical issues will be discussed. Only 3 practicum credits may be applied to the major. Offered fall and spring semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. This course is repeatable for a total of 3 hours. Course Attributes: Requires Department Approval.

SOC 4881 - Senior Capstone Research 1*1 Credit*

Development of research topic and/or question, literature review, and outline of research project directed by faculty advisor. Capstone Research does not count toward Sociology elective hours. Senior status, sociology primary major, and permission of advisor. Offered fall and spring semesters. Prerequisite(s): SOC 1001 Minimum Grade of C. Corequisite(s): SOC 4461. Must be enrolled in one of the following Classifications: Junior, Senior.

SOC 4891 - Senior Capstone Research 2*2 Credits*

Research design, data collection, data analysis, and writing of the research paper directed by faculty advisor. Capstone Research does not count toward Sociology elective hours. Offered fall and spring semesters. Prerequisite(s): SOC 4881 Minimum Grade of C and SOC 1001 Minimum Grade of C. Corequisite(s): SOC 4471. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Social Science.

SOC 4981 - Independent Study in Sociology*1 to 4 Credits*

Offered fall and spring semesters. Course Attributes: Requires Department Approval.

DEPARTMENT OF TECHNOLOGICAL STUDIES

Professor Rouch; Associate Professors Jao, Nutter (Chair); Assistant Professor Miller; Robinson

Mission Statement

The mission of the Department of Technological Studies is to graduate leaders that pursue life-long learning, and possess a high degree of technological literacy and the ability to implement and manage applied engineering technologies to benefit the world.

Overview Statement

The course work comprising the curriculum in the Department of Technological Studies is designed to prepare students for careers in professional and technical fields throughout industry and education. Classroom activities feature application-oriented experiences that reinforce the theory presented in lecture and readings to provide broad, foundational experiences in cutting edge technologies and applied sciences. Course work and associated laboratory assignments place emphasis on researching, designing, experimenting, fabricating, and managing.

Accreditation

The Construction Management and Manufacturing Technology programs are accredited by the Association for Technology, Management, and Applied Engineering (ATMAE).

The Technology Education major and teacher licensure program is accredited by the National Council for Accreditation of Teacher Education (NCATE).

Majors, Minors and Degrees Offered

Construction Management Major (BS)
 Manufacturing Technology Major
 Applied Robotics Concentration (BS)
 Manufacturing Management Concentration (BS)
 Technology Education Major (BS)
 Technology Systems Minor

Certification and Licensure Offered

The department provides opportunities for students to gain certifications in the following: ATMAE Manufacturing Specialist, Construction, MS Office software related, and other software related certifications, as appropriate.

Students majoring in technology education pursue the following teaching licensure: Career-Technical Technology Education Licensure (grades 4-12).

Admission Requirements

Students desiring teacher licensure must meet the requirements for admission into the Center for Teacher Education. See page 69 for details.

In addition, the department has established articulation programs with several area community and technical colleges. All transfer students must complete a minimum of 18 hours of 3000-level or above TECH courses at Ohio Northern University. Consult the department chair for more details.

Special Programs

Tours of Industries

The department has developed an extensive program of field work involving tours to relevant industries both regionally and internationally. Students are required to participate in at least one tour-of-industry class. The department will periodically take the tour of industries to study abroad locations.

Cooperative and Internships Experiential Learning

The department offers two different work experience programs. The first is a co-op program in which the student enrolls in TECH 3801 (Professional Practice) and completes at least two semesters of work experience, usually with the same company. No other courses can be taken while on a co-op experience. Participation in intercollegiate athletic teams is prohibited while on a co-op experience. Once the experience is begun, it can be terminated by the participant, the department, the university, or the employer for any reason. Co-op employers must meet the requirements of the department and the university. Requirements of the co-op program are provided in the TECH 3801 course description and details are available in the department office.

The other experiential learning opportunity is a one-semester internship (TECH 4841) designed to give the student a 15 week (or equivalent) real-world experience, which is completed during the normal four-year program.

Organized Professional Activities

Students are given opportunities and are expected to participate in a variety of organized professional activities with professional student organizations such as the Society of Manufacturing Engineers (SME); the International Technology and Engineering Educator's Association (ITEEA); Association of Technology, Management, and Applied Engineering (ATMAE); and the ONU Construction Management Association (ONUCMA).

Major Course Requirements

All required courses in major subject area (TECH) must be completed with a grade of 'C' or higher. All required courses outside of the major subject area must be completed with a grade of 'D' or higher.

Construction Management Major (82-92 credit hours)

TECH 1001	Technology and Society (3)
TECH 1201	Introduction to CAD (3)
TECH 1301	Materials Science (3)
TECH 1601	Fundamentals of Electronics (3)
TECH 2211	Construction Design (4)
TECH 2301	Materials and Processes (3)
TECH 2501	Construction Materials and Methods (4)
TECH 2701	Fluid and Mechanical Systems (3)
TECH 3251	Construction Specifications and Methods (3)
TECH 3421	Database Management and Applications (3)
TECH 3511	Applied Soils and Foundations (3)
TECH 3611	Applied Controls 1 (4)
TECH 4521	Construction Estimating and Scheduling (3)
TECH 4961	Tour of Industries (1)
TECH 4991	Senior Capstone (1)
TECH xxx1	Technical elective (3)
TECH xxx1	Technical elective (3)

Complete one (capstone experience)

TECH 3801	Professional Practice in Technological Studies (1)
or	(Must complete two semesters to satisfy Capstone)
TECH 4841	Internship (3)

Other required courses

BIZ 2131	Legal Environment for Business Planning (3)
BIZ 2331	Behavioral Management for Business Planning (3)
CE 2011	Surveying (3)
CE 4141	Project Management (3)
MATH/STAT	Three courses of math or statistics at MATH 1251 or higher (9)
MGMT 3631	Human Resource Management (3)
or	
MGMT 4571	Project Management (3)
PHYS/CHEM	Physics 1001 (3), CHEM 1001 (3)
	(Two physics or chemistry courses, these or higher)

Manufacturing Technology Major (78-82 credit hours)

TECH 1001	Technology and Society (3)
TECH 1201	Introduction to CAD (3)
TECH 1301	Materials Science (3)
TECH 1601	Fundamentals of Electronics (3)
TECH 1621	Visual Basic (3)
TECH 2231	Product Design and Analysis (4)
TECH 2301	Materials and Processes (3)
TECH 2401	Computer Networking (3)
TECH 2701	Fluid and Mechanical Systems (3)
TECH 3421	Database Management and Applications (3)
TECH 3611	Applied Controls 1 (4)
TECH 3631	Applied Controls 2 (3)
TECH 4961	Tour of Industries (1)
TECH 4991	Senior Capstone (1)
TECH xxx1	Technical elective (3)
TECH xxx1	Technical elective (3)

Applied Robotics Concentration (35 credit hours)

TECH 4121	Manufacturing Management (4)
TECH 4621	Programming in Embedded Systems (4)
TECH 4341	Advanced Robotics 1 (capstone) (2)
TECH 4351	Advanced Robotics 2 (capstone) (2)
ENGR 2131	Statics (3)
ENGR 2231	Strength of Materials (3)

Other required courses

MATH 1631	Calculus 1 (4)
MATH 1641	Calculus 2 (4)
STAT 1311	Intro to Statistics (3)
PHYS 2311	Physics 1 (3)
CHEM 1001	Chemistry (3)

Manufacturing Management Concentration (33 credit hours)

TECH 3211	Digital Manufacturing (3)
TECH 3221	Manufacturing Simulation (3)
TECH 4111	Product Manufacturing (4)
TECH 4121	Manufacturing Management (4)
TECH 4341	Advanced Robotics 1 (capstone) (2)
TECH 4351	Advanced Robotics 2 (capstone) (2)

Other required courses

CHEM/PHYS	CHEM 1001 (3), Physics 1001 (3)
	(Two physics or chemistry, these or higher)
MATH/STAT	Three courses of math or statistics at MATH 1251 or higher (9)

Technology Education Major (89 credit hours)

TECH 1001	Technology and Society (3)
TECH 1201	Introduction to CAD (3)
TECH 1301	Materials Science (3)
TECH 1421	Web Design (3)
TECH 1601	Fundamentals of Electronics (3)
TECH 2211	Construction Design (4)
TECH 2301	Materials and Processes (3)
TECH 2401	Computer Networking (3)
TECH 2501	Construction Materials and Methods (4)
TECH 2701	Fluid and Mechanical Systems (3)
TECH 3611	Applied Controls 1 (4)
TECH 4111	Product Manufacturing (4)

TECH 4961	Tour of Industries (1)
TECH 4991	Senior Capstone (1)
TECH xxx1	Technical elective (3)
TECH xxx1	Technical elective (3)

Required education courses

EDUC 1151	Culture and Schooling (3) (20 hours field)
EDUC 2101	Exceptional Learners (3) (20 hours field)
EDUC 2681	Curriculum and Assessment (3) (20 hours field)
EDUC 3041	Strategies for Technology Education (3) (18 hours field and 6 hours clinical)
EDUC 3451	Literacy Across the Content Areas AYA/MA (3) (20 hours field)
EDUC 4581	Organization and Methods for Technology Education (3)
EDUC 4451	Leadership Seminar in Education (2) (20 hours field)
EDUC 4741	Student Teaching/MA (12)

Other required courses

PSYC 1001	Psychology (3)
PSYC 2151	Development Across the Lifespan (3)
CAMS 1311	Communication in the Classroom (3)

Notes:

Students must be admitted to teacher education to take 3000-level and above education (EDUC) courses.

Students must have 160 hours of course related field experience.

Graduates of the program must attain a passing score on Praxis II for Teacher Licensure.

Admission to teacher education requires at least a 2.50 accumulative GPA.

Minor Course Requirements

All courses required for a minor must be completed with a grade of 'C' or higher.

Technology Systems Minor (18 credit hours)

Students from all disciplines are encouraged to use courses from the Department of Technological Studies as a corollary to their major. This will permit students to use technology custom-made to meet individual needs and interests. Any student interested in the technology systems minor should contact the department to obtain a proposal form that the student completes to indicate personal objectives to be met with the minor plus a list of intended courses for the minor.

TECH 1001	Technology and Society (3)
TECH ###1 ¹	Technology elective (3)
TECH ###1 ¹	Technology elective (3)
TECH ###1 ¹	Technology elective (3)
TECH ###1 ¹	Technology elective (3)
TECH ###1 ¹	Technology elective (3)

Notes:

¹Technical electives taken for the minor may not be part of a student's major program of study and require department approval. Specific courses used to fulfill the requirements of the minor must be proposed to the Department of Technological Studies prior to declaring the minor.

Subject - Technology (TECH)

TECH 1001 - Technology and Society

3 Credits

An overview of the development and design of technical systems in society, their impact throughout history, and procedures for making choices of appropriate technology to apply in the future. Lab activities and visitations utilized to reinforce concepts. Offered fall semester. Course Attributes: Critical and Creative Thinking, Informed Ethical Responses.

TECH 1201 - Intro to Computer Aided Design

3 Credits

Graphic representation using the personal computer. Attention will be placed on the standards of the technical graphics field and the graphic illustration and visualization techniques as applied to CAD software. Develop proficient use of CAD software for solid modeling and orthographic projection, sections, auxiliary views, file conversion, and size description. Offered spring semester.

TECH 1301 - Materials Science

3 Credits

An investigation into major industrial materials and their properties using industry standard testing formulas and equipment. The conversion of raw materials via extraction, refining, and processing into consumer products. An emphasis on safety, metallurgy, nondestructive testing, destructive testing and material processing will be applied. Offered fall semester.

TECH 1401 - Intro to Information Systems

3 Credits

Fundamental computer literacy skills in Windows environment. Basic computer terminologies. Productivity software applications such as word processing, spreadsheets, database and presentation tools with an emphasis on organizing, accessing, managing and presenting data for personal and professional communication. Course Attributes: Effective Communication Non-Writing.

TECH 1421 - Web Design

3 Credits

The development of computing skills focusing on web site design. Site structure, site planning, multimedia authoring, and the use of computer peripherals. Developing web sites using XHTML, DHTML, CSS, and web authoring software applications. Designing web based computer graphics and publishing web sites to the WWW. Offered fall and spring semesters. Course Attributes: Diversity-Human Interaction.

TECH 1601 - Fundamentals of Electronics

3 Credits

The fundamentals of alternating and direct current will be explored in the context of changing technological advances. Basic electrical circuits and electronic components will be studied and utilized in the laboratory. Offered fall and spring semesters. ACT Math 21 or MATH 1251 Minimum Grade of C or MATH 1401 Minimum Grade of C or MATH 1431 Minimum Grade of C or MATH 1561 Minimum Grade of C or MATH 1611 Minimum Grade of C or MATH 1631 Minimum Grade of C or MATH 1641 Minimum Grade of C. Course Attributes: Scientific and Quantitative Literacy.

TECH 1621 - Visual Basic

3 Credits

An introduction to computer programming and application development using Visual Basic. Computer lab activities and assignments emphasize the development of programs for various technology applications, including the use of text files and graphics.

TECH 1901 - Special Topics in Technology

1 to 3 Credits

May be repeated as the topic varies. Unlimited repeats permitted.

TECH 1911 - ST-Summer Honors Institute

1 Credit Grading mode is S/U

Topics in the Technology field. Enrollment is restricted to attendees of the Summer Honors Institute. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval, Technological Studies.

TECH 2211 - Construction Design

4 Credits

Pre-construction planning, scheduling, design, engineering and layout. Residential and commercial construction principles, print reading, architectural details, plot surveying and layout, scheduling, creation of architectural working drawings and introductory cost estimating using the latest software and technology available. Offered spring semester. Prerequisite(s): TECH 1201 Minimum Grade of C. Course Attributes: Informed Responses-Aesthetics.

TECH 2231 - Product Design and Analysis

4 Credits

Technical sketching, product design processes and the components/variables of good design. Use of CAD solids modeling software to create part models and assemblies. Product designs will be designed and analyzed for manufacturability, performance, and potential for profitability for a company. Oral presentations, patent searches, and prototype development. Offered fall semester. Prerequisite(s): TECH 1201 Minimum Grade of C.

TECH 2301 - Materials and Processes

3 Credits

Materials and processes involved in machining and fabricating of consumer products. Machining technologies include traditional and non-traditional material removal equipment, tooling and processes. Fabrication operations include welding, fastening and adhesives. Offered spring semester.

TECH 2311 - Custom Woodworking

3 Credits

Basic processes, tools, and materials employed in the production of custom, individually designed, and crafted wood projects. Offered summers. This course is repeatable for a total of 6 hours.

TECH 2401 - Computer Networking

3 Credits

Introduction to network terminologies, infrastructure (wired topologies), network functions and models of internet. Description of the OSI and TCP/IP layered models. Overview of applications and services of Application, Network, Data Link and Physical Layers. Simulation of LAN topology, configuration of routers and switches, implementation of cable selection and IP addressing schemes. Offered fall and spring semesters.

TECH 2501 - Construction Materials & Methods

4 Credits

Basic concepts of construction techniques used today; including the methods and materials involved in framing, enclosing, and finishing residential and light commercial buildings. Financing, contracting, procuring, safety planning, supervising, site-operation, foundation, structural elements, utilities, landscaping and personnel associated with construction activities. Offered fall semester.

TECH 2701 - Fluid and Mechanical Systems

3 Credits

Concepts of fluid power transmission, mechanical applications, and its control. Methods of maintaining, troubleshooting, and repairing energy conversion and transmission devices. Hydraulic and pneumatic power concepts, components, and their symbols. Control techniques experienced with hardware, and simulated with software based PLC ladder logic that is used in fluid and mechanical systems. Offered spring semester.

TECH 2901 - Special Topics

1 to 3 Credits

May be repeated as the topic varies. Unlimited repeats permitted.

TECH 2971 - Independent Study

1 to 4 Credits

Individual study of a topic of particular interest to the student in Technological Studies. May be repeated as the topic varies. Must be enrolled in one of the following Fields of Study: Construction Management, Manufacturing Technology, Technology, Technology Education. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted.

TECH 3211 - Digital Manufacturing

3 Credits

Design of mechanical parts and products for manufacturing using 3D solid/parametric CAD modeling. Applications of computer simulations for analysis of assembly processes and robotics production improvements. Overview of digital manufacturing technologies, product data and product life-cycle management systems. Prerequisite(s): TECH 2231 Minimum Grade of C.

TECH 3221 - Manufacturing Simulation

3 Credits

Application of sophisticated computer simulation software for ergonomic analysis of manufacturing operations and processes. Learn uses of server-based and cloud-computing applications to permit secure data sharing and collaborations for design of products and processes. Conduct a team project with a local industrial company to analyze a production operation utilizing manufacturing simulation, including presentation of results to the company management. Prerequisite(s): TECH 3211 Minimum Grade of C.

TECH 3251 - Construction Specifications and Methods

3 Credits

This course is designed to provide knowledge of construction documents and contracts as they relate to a residential and commercial construction project. The student will understand the documentation process from pre design to post design phases of construction through the interpretation of a set of construction documents including contracts, specifications in CSI master format, working drawings, regulatory codes, and any sustainability concepts that apply. Prerequisite(s): TECH 2501 and TECH 2211.

TECH 3411 - Wide Area Networking

3 Credits

The equipment and procedures for selecting hardware and configuring networking equipment and control software for network communication. Overview of WAN protocols, routing protocols, network management, and physical connections. Offered spring semester. Prerequisite(s): TECH 2401 Minimum Grade of C.

TECH 3421 - Database Management and Applications

3 Credits

Comprehensive introduction to database concepts, design and applications. Database terminologies, relational database, database models, data normalization, and Structured Query Language (SQL). Constructing and maintaining of databases and objects in databases. Implementation of data sharing in applications. Offered fall and spring semesters.

TECH 3461 - Digital Photography

3 Credits

Techniques of digital photographic composition, camera types, uses and accessories, photographic optics, Photoshop software applications, special effects, image formats, media types, equipment and accessory use, laboratory methods, materials for the collection and manipulation of digital images, and methods of processing. Reference to, and experiences of chemical photography and the shift to digital photographic methods. Offered fall and spring semesters. Course Attributes: Informed Responses-Aesthetics.

TECH 3511 - Applications of Soils and Foundations

3 Credits

Principles of soil mechanics as it relates to general construction and foundation systems including footings, piles, caissons, cofferdams, structural concrete, concrete emplacements and other substances. Includes applications with properties of soils, soil exploration, compaction, water in soil, consolidation and settlement, soil strength, foundation design, and slope stability. Offered spring semester. Prerequisite(s): TECH 2501 Minimum Grade of C. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

TECH 3611 - Applied Controls 1

4 Credits

Combinational digital logic and logic design will lay down a framework from which programmable logic controllers are presented. The concepts of inputs, outputs, relay logic and ladder logic will be addressed. Industrial robots will also be introduced and on-line programming will include tasks such as pick and place, finish application, and robot integration. Offered fall semester. Prerequisite(s): TECH 1601 Minimum Grade of C.

TECH 3631 - Applied Controls 2

3 Credits

A further investigation into automation systems dealing with automated manufacturing practices in CNC machines, PLCs, vision systems, RFID, and industrial robotics. Activities include such things as automated handling and processing of materials using conveyors, positioners/workholders, industrial robots, and CNC machines. Computer Integrated Manufacturing techniques including technologies such as sensing, vision, automated product identification, and storage and retrieval. Offered spring semester. Prerequisite(s): TECH 3611 Minimum Grade of C.

TECH 3801 - Professional Practice in Technological Studies

1 Credit Grading mode is S/U

Study and professional experience in a technological studies related occupation in an industrial enterprise, consulting firm, or governmental agency. Daily reports, midterm and final report on the assignment and employer's evaluation are required. Minimum 2.50 accumulative GPA. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. This course is repeatable for a total of 4 hours.

TECH 3901 - Special Topics

1 to 3 Credits

May be repeated as the topic varies. Unlimited repeats permitted.

TECH 4111 - Product Manufacturing

4 Credits

Application of operations management principles and practices in the manufacture of various types of products into consumer products. Creation, management, and dissolution of a simulated company to produce and sell a tangible product. Emphasis on process design, material handling, organization of work, division of labor, distribution and sales practices relating to mass production industries. Offered fall semester. Prerequisite(s): (TECH 2301 Minimum Grade of C and TECH 2231 Minimum Grade of C) or BIZ 2331 Minimum Grade of C.

TECH 4121 - Manufacturing Management

4 Credits

Manufacturing management principles and applications applied in mass production industries. Includes safety, process planning and design, quality assurance, maintenance, materials handling, inventory and production control, lean manufacturing, and globalization. Quality topics include Statistical Process Control, TQM, Six Sigma, and ISO/QS/TS quality systems. Work measurement topics include methods engineering and traditional time studies. Offered fall semester. Prerequisite(s): TECH 2301 Minimum Grade of C or BIZ 2331 Minimum Grade of C.

TECH 4341 - Advanced Robotics 1

2 Credits

The first half of a two course capstone sequence. An advanced investigation of robotics and automated equipment. Topics of investigation will include robot and automated system design, construction, programming and troubleshooting in a team based environment. Offered spring semester. Prerequisite(s): TECH 3611 Minimum Grade of C Must be enrolled in one of the following Classifications: Junior, Senior.

TECH 4351 - Advanced Robotics 2

2 Credits

The second half of a two course capstone sequence. An advanced investigation of robotics and automated equipment. Topics of investigation will include robot and automated system design, construction, programming and troubleshooting in a team based environment. Offered spring semester. Prerequisite(s): TECH 4341 Minimum Grade of C.

TECH 4521 - Construction Estimating and Scheduling

3 Credits

Methods and techniques in construction estimating, scheduling, and bidding to include quantity take-off, labor costs, material costs, overhead, profits, and bidding using industry standard software packages. Includes extended practice in scheduling and submittal activities from pre-construction to completion. Practical applications emphasized. Offered fall semester. Prerequisite(s): TECH 3511 Minimum Grade of C.

TECH 4621 - Programming in Embedded Systems

4 Credits

Exploration of programming applications in an embedded environment using various microcontroller functions including I/O, memory, and interface techniques. Offered fall semester. Prerequisite(s): TECH 3611 Minimum Grade of C.

TECH 4671 - Robotic Systems

3 Credits

An introduction to digitally-controlled robotic manipulators. Topics include coordinate frames, coordinate frame transformations, forward and inverse kinematic solutions, and control of robot manipulators. Offered spring semester. Prerequisite(s): TECH 3651 Minimum Grade of C.

TECH 4801 - Technical Education Foundations

3 Credits

Elements of technical instruction, scope and sequence, training program development, and the philosophical underpinnings regarding a successful learning environment. Provides the development of planning, organizing, and administering technical laboratories for those planning careers in the teaching/training in industry and vocational/technical secondary and post-secondary schools. Prerequisite(s): PSYC 1001 or PSYC 2151.

TECH 4811 - Educational Technologies for Technical Education

3 Credits

Design and develop technology-enhanced learning for teaching and training for adult learners at the post-secondary level. Focus is on the alternatives for supporting technical instruction with educational technology multimedia and instructional design. Students explore concepts and findings identified in adult literature and apply to designing successful learning systems. Corequisite(s): TECH 4801.

TECH 4821 - Tests, Measurement, and Assessment in Technical Education

3 Credits

The consideration of methodological, theoretical, and ethical problems involved in test construction and use. Topics which are covered include learning styles, multiple intelligences, elements of validity and reliability related to tests and measures, and how to use results to improve instruction and course procedures. Corequisite(s): TECH 4801.

TECH 4831 - Instructional Design: Strategies in Technical Education

3 Credits

The study of the systematic way of designing, developing, implementing, and evaluating the processes of learning and teaching with specific objectives based on research in human learning and communication in the Teaching/Learning process in Technical Education. Specific attention will be given to developing appropriate strategies for delivery of different types of technical content for efficient learning. Prerequisite(s): TECH 4801.

TECH 4841 - Internship

3 to 6 Credits

A supervised program of experiences in production practices, management techniques, research applications, and other activities representative in modern industry. Selection is based upon proper application, screening, and acceptance by an appropriate industry. Three credit hours required to satisfy a capstone, with one credit hour for each 100 hours of documented work experience. A maximum of 6 hours to count toward graduation. Minimum 2.50 accumulative GPA. Must be enrolled in one of the following Classifications: Junior, Senior. This course is repeatable for a total of 6 hours.

TECH 4901 - Special Topics

1 to 3 Credits

May be repeated as the topic varies. Unlimited repeats permitted.

TECH 4951 - Senior Project

1 Credit

Individual research project expanding upon and applying content learned in a Technological Studies major. Course must be repeated 2 times to fulfill the senior capstone requirement unless the student participates in a specific major capstone requirement in one of the majors in the department. This course is repeatable for a total of 2 hours.

TECH 4961 - Tour of Industries

1 Credit Grading mode is S/U

Participation in the annual department sponsored comprehensive tour of industries including the submission of a written technical report pertaining to one or more facets of the experience. Offered spring semester. This course is repeatable for a total of 4 hours.

TECH 4971 - Independent Study

1 to 3 Credits

Individual study of a topic of particular interest to the student in Technological Studies. May be repeated as the topic varies. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted.

TECH 4991 - Senior Capstone

1 Credit Grading mode is S/U

Report, presentation, and culmination of the senior capstone experience. Presentation of the project management planning, researching, developing, fabricating, assembling, testing, and evaluating processes completed in the senior capstone activity. Offered spring semester. Prerequisite(s): TECH 4841 Minimum Grade of C or TECH 3801 Minimum Grade of C or EDUC 4721 Minimum Grade of C or TECH 4351 Minimum Grade of C. Concurrency allowed. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

DEPARTMENT OF THEATRE ARTS

Professor Bell (*Chair and Resident Artist*); **Assistant Professors** Davis and Sage; **Lecturer** Robbins; **Resident Artists** Osburn-Manley; **Instructor/Resident Lighting Designer** DeVault; **Instructor/Resident Technical Director** Phillips; **Lecturer of Arts Administration** Humphrey; **Music Director** Juergens; **Stage Management Mentor** Colleen Knapp; **Costumer** Ansari

Mission

Theatre arts majors emphasize a liberal arts education combined with a professional program, designed to produce graduates who are prepared for a lifetime of learning in a diverse and changing world. Our flexible programs maintain professional standards while adapting easily to individual needs and interests. Our curriculum and manner of instruction encourage critical thinking, development of aesthetic and ethical standards and an understanding of human communication in all aspects of personal and professional life. With a strong foundation in general knowledge and specialty studies, graduates are prepared for entry level positions or graduate studies in their professional areas. They also attain the reasoning, organization and management skills necessary for a useful and meaningful life.

Overview Statement

The departmental course offerings promote understanding of the theory, practice and aesthetics of human communication and theatre arts. Students pursue majors particular to their professional education goals.

Majors, Minors and Degrees Offered

International Theatre Production (BFA)
Musical Theatre Major (BFA)
Theatre Major (BA)
Theatre Minor
Arts Administration Minor
Dance Minor

Admission Requirements

An interview and portfolio review is required for the BFA in theatre design and production. An audition is required for the BFA in musical theatre.

Special Programs

Internships and Study Abroad

Internships are an integral part of all programs. Study abroad programs and internships are encouraged and facilitated by the department.

Departmental Activities

All ONU students are encouraged to become involved in a variety of departmental activities. Ohio Northern University theatre offers opportunities for students to act in and engage in technical work for musicals, new works, readers theatre, dance and traditional plays. Theatre Arts students are encouraged to participate in the theatre honorary Theta Alpha Phi.

Major Course Requirements

All required courses in the major subject area must be completed with a grade of "C" or higher.

International Theatre Production

The international theatre production major graduates students with a comprehensive knowledge of the aspect of theatre technology and design. Students are exposed to the different methodologies employed by theatre artists from across the nation and around the globe, providing students with a broad understanding of the theatre arts. The program is intended for the individual who plans to pursue a professional career, graduate study or further training in theatre. Students are expected to successfully complete portfolio reviews each year during their course of study. Failure to successfully complete two portfolio reviews in a row may result in dismissal from the program.

BFA Degree Requirements (71 to 82 credit hours)

TATA 1001 Orientation (0)
TAAD 2111 Art of Presenting (3)

TADP 2001 Portfolio review (0)
TADP 2111 Fundamentals of Stagecraft (3)
TADP 2121 Fundamentals of Lighting/Sound (3)
TADP 2131 Fundamentals of Costumes (3)
TADP 2151 Makeup (2)
TADP 2551 Technical Direction (3)
TADP 2601 Stage Management (3)
TADP 2651 Stage Management Practicum (1)
TADP 2751 Intro to Design (3)
TADP 3351 Internship (1-12)
TADP 3501 Advanced Stagecraft (3)
TADP 3761 Advanced Production Practicum (1)
TADP 3781 Design Practicum (1)
TADP 4001 Portfolio Review 2 (0)
TADP 4951 Capstone (2)
TATH 2591 Acting for Non-Majors (2)
TATH 2751 Play Analysis (3)
TATH 2911 World Theatre History 1 (3)
TATH 2921 World Theatre History 2 (3)
TATH 3001 Symposiums (0)
TATH 4451 Business of Theatre (1)
TECH 1201 Introduction to CAD (3)
TECH 1601 Fund. Elec/Electron. (3)

One-year competency of a foreign language (6)

Select six (6) hours:

TADP 3751 Scenic Design (3)
TADP 3751 Lighting Design (3)
TADP 3751 Sound Design (3)
TADP 3751 Costume Design (3)
TADP 3551 Elegant Solutions (3)

Select three (3) hours:

TATH 3801 World Theatre History III (3)
TATH 3911 American Theatre History (3)
TATH 3821 Playwriting (3)
TAMT2101 Musical Theatre History (3)
TADN 3601 Dance History (3)

Select three (3) hours:

TADP 2761 Production Practicum (1)
TADP 2651 Stage Management Practicum (1)
TADP 2571 Shop Practicum (1)
TADP 3781 Design Practicum (1)
TADP 3761 Advanced Production Practicum (1)

Select three (3) hours:

PLSC 1021 International Studies (3)
GEOG 2261 World Regional Geography (3)

Musical Theatre Major

Musical theatre provides professional training in dance, music and theatre within a liberal arts environment. Students must audition for admittance into the major and are expected to successfully complete a sophomore hearing during their course of study. Graduates typically pursue professional careers in the performing arts. It is a policy of the Department of Theatre Arts that a student not be able to earn a BFA in as a theatre arts major in musical theatre or international theatre production while concurrently earning a BM in performance or music education.

BFA Degree Requirements (73 credit hours)

TATA 1001 Orientation (0)
TADN 3611 Musical Theatre Dance Styles I (2)
TADN 4611 Musical Theatre Dance Styles II (2)
TADN 1201 Ballet I or TADN 1301 Modern Dance I
TADP 2151 Make-up (2)
TADP 2651 Stage Management Practicum (1)
TAMT 2951 Sophomore Hearing (0)
TAMT 3501 Acting Styles for Musical Theatre (3)
TAMT 4501 Musical Theatre Audition Techniques (2)
TAMT 4951 Senior Capstone (2)
TATH 2751 Play Analysis (3)

TATH 2911 World Theatre History I (3)
or
TATH 2921 World Theatre History II (3)
TATH 3001 Symposium (0)
TATH 2601 Introduction to Acting (2)
TATH 3601 Acting 2: Scene Study (3)
TATH 2501 Movement for the Actor (1)
TATH 4451 Business of Theatre (1)
TATH 2401 Voice and Speech (2)
MUSC 1041 Fundamentals of Music for MT (3)
MUSC 1051 Advanced Musicianship for MT (3)
MUSL 1111 Applied Lessons (1)
MUSL 1121 Applied Lessons (1)
MUSL 2111 Applied Lessons (1)
MUSL 2121 Applied Lessons (1)
MUSL 3111 Applied Lessons (1)
MUSL 3121 Applied Lessons (1)
MUSL 0011B Applied Piano (2)

Select twelve (12) hours:

TATA 2901 Special Topics (1 to 3)
TADN 2121 Dance and Culture (3)
TADN 3601 Dance History (3)
TADN 4601 Dance Composition (3)
TADN 1201 Ballet I (2)
TADN 1301 Modern I (2)
TADN 1401 Jazz I (2)
TADN 1501 Tap I (2)
TADP 2601 Stage Management (3)
TATH 3501 Stage Combat (2)
TATH 3651 Acting 3: Shakespeare (3)
TATH 3801 Topics in Theatre History (3)
TATH 3861 Directing (3)
TATH 3911 American Theatre History (3)
MUSE 1111 Opera Workshop (1)

Select four (4) hours:

TADN 2601 Dance Practicum (1)
TAMT 2601 Performance Practicum (1)
TATH 2611 Performance Practicum (1)

Select three (3) hours:

TADP 2111 Fundamentals of Stagecraft (3)
TADP 2121 Fundamentals Lighting and Sound (3)
TADP 2131 Fundamentals of Costuming (3)

Select six (6) hours*:

TADN 1401 Jazz 1 (2) or TADN 1501 Tap 1 (2)
TADN 2201 Ballet II (2)
TADN 2301 Modern II (2)
TADN 2401 Jazz II (2)
TADN 2501 Tap II (2)
TADN 3201 Ballet III (2)
TADN 3301 Modern III (2)
TADN 3401 Jazz III (2)
TADN 3501 Tap III (2)

*No more than 1 class from a 1000 level will count toward this requirement

Select six (6) hours:

TATH 2911 World Theatre History I (3)
TATH 2921 World Theatre History II (3)
TAMT 2101 Musical Theatre History and Literature (3)

Theatre Major

Theatre explores the artistic expression of human action. As a liberal art, it is a foundation for many careers where critical thinking, analytic ability and creative expression are important. Graduates have been successful in theatre, law, medicine, banking and public service. The program permits the student to develop his or her individual focus.

BA Degree Requirements (39 credit hours)

TATA 1001 Orientation (0)
TADP 2121 Fundamentals of Lighting and Sound (3)
or
TADP 2111 Fundamentals of Stagecraft (3)
TATH 2601 Introduction to Acting I (2)
TATH 2751 Play Analysis (3)
TATH 2911 World Theatre History I (3)
TATH 2921 World Theatre History II (3)
TATH 3001 Theatre Symposium (0)
TATH 4951 Senior Capstone (2)

Select two (2) hours:

TAAD 2601 Arts Administration Practicum (1)
TADN 2601 Dance Practicum (1)
TADP 2571 Shop Practicum (1)
TADP 2651 Stage Management Practicum (1)
TADP 2761 Production Practicum (1)
TADP 3781 Design Practicum (1)
TATH 2611 Performance Practicum (1)
TATH 3621 Directing Practicum (1)

Select three (3) hours:

TADN 3701 Dance History (3)
TADN 2121 Dance and Culture (3)
TATH 3801 Topics in Theatre History/Dramatic Literature (3)
TATH 3821 Playwriting (3)
TATH 3911 American Theatre History (3)
TATH 4851 Dramatic Criticism and Performance Studies (3)
ENGL 2081 Modern World Drama (3)
ENGL 2601 Introduction to Shakespeare (3)
ENGL 4121 Shakespeare (3)
FREN 4031 French Theatre (3)

Select three (3) hours:

TADP 2121 Fundamentals of Lighting and Sound (3)
TADP 2571 Shop Practicum (1)
TADP 2601 Stage Management (3)
TADP 2651 Stage Management Practicum (1)
TADP 2751 Introduction to Design (3)
TADP 2761 Production Practicum (1)
TADP 3501 Advanced Stage Technique in Stagecraft (3)
TADP 3761 Advanced Theatre Production Practicum (1)
TADP 3781 Design Practicum (1)

Select fifteen (15) hours:

In addition to the courses listed above, the student must complete 15 credit hours in TADP, TATH, TAMT, or TADN courses. A maximum of six of these hours may be in dance, and a maximum of three of these hours may be practicum credit.

Theatre Arts Business Option This option is available only to theatre arts majors.

Additional Requirements (21 credit hours)

ABUS 2011 Personal Computer Applications for Business (3)
BIZ 2101 Financial Accounting Foundations for Business Planning (3)
BIZ 2131 Legal Environment for Business Planning (3)

Select six (6) hours:

FINC 1101 Personal Finance (3)
BIZ 2331 Behavioral Mgmt for Business Planning (3)
BIZ 2511 Marketing for Business Planning (3)
BIZ 3621 Financial Analysis for Business Planning (3)
MRKT 4601 Integrated Marketing Communication (3)

Select two (2) courses:

Two additional 3000- or 4000-level business courses as approved by the TATA department.

Minors

All courses required for a minor must be completed with a grade of "C" or higher.

Arts Administration Minor (19 credit hours)

MGMT 4771	Non-profit Management (3)
TAAD 2111	Introduction to Arts Admin. (3)
TAAD 2311	Arts Marketing/Audience Development (3)
TAAD 2411	Grant Writing/Arts Fundraising (3) or ENGL 2061 Grant Writing
TAAD 2611	Arts Administration Practicum (1)
TATH 3001	Symposium (0)
TAAD 3011	Arts Administration Symposium (0)
TAAD 3351	Arts Administration Internship (2)
TATH 4451	Business of Theatre (1)

Select three (3) hours:

BIZ 2511	Marketing for Business Planning (3)
CAMS 2111	Advanced Presentational Speaking (3)
CAMS 3451	Organizational Communication (3)
ENGL 2441	Desktop Publishing (3)
TECH 1421	Web Development and Multimedia (3)

Dance Minor (18 credit hours)

TADN 1201	Ballet I (2)
TADN 1301	Modern I (2)
TADN 2121	Dance and Culture (3) or TADN 3601 Dance History (3)
TADN 2201	Ballet II (2) or
TADN 3201	Ballet III (2)
TADN 2301	Modern II (2) or
TADN 3301	Modern III (2)
TADN 2601	Dance Practicum (1)
TADN 4601	Dance Composition (3)

Select four (4) hours:

TADN 1211	Social Dance (1)
TADN 1221	International Folk Dance (1)
TADN 1401	Jazz I (2)
TADN 1501	Tap I (2)
TADN 2201	Ballet II (2)
TADN 2301	Modern II (2)
TADN 2401	Jazz II (2)
TADN 2501	Tap II (2)
TADN 3201	Ballet III (2)
TADN 3301	Modern III (2)
TADN 3401	Jazz III (2)
TADN 3501	Tap III (2)
TADN 4201	Ballet IV Pointe (2)

Theatre Minor (20 credit hours)

A maximum of six (6) credit hours in practicum courses may count toward the theatre minor. Students may not accomplish the minor in conjunction with any other Theatre discipline major.

TATH 2751	Play Analysis (3)
TATH 2911	World Theatre History I (3) or
TATH 2921	World Theatre History II (3)

Select one two-hour course (2) from a performance-based area: A practicum and skill driven course. A formal list is available in the department and on the department website.

Select one three-hour course (3) from a production-based area: A practicum and skill driven course. A formal list is available in the department and on the department website.

Select at least three other three-hour courses (for a total of nine (9) hours from the theatre discipline.

Subject-Arts Administration (TAAD)

TAAD 2111 - Introduction to Arts Administration

3 Credits

General overview of programming, arts management skills, boards, mission statements, long and short range plans, personnel development, logistics of running various arts organizations and planning effective seasons. Offered spring semester.

TAAD 2311 - Arts Marketing/Audience Development

3 Credits

Course focuses on marketing strategies for non-profit arts organizations and audience development. This includes the study of community outreach and arts education in addition to general audience development. Offered fall semesters. Prerequisite(s): TAAD 2111 Minimum Grade of C.

TAAD 2411 - Grant Writing/Arts Fundraising

3 Credits

Course explores fundraising techniques, prospect identification, gifts, capital campaigns and other sources of funding for arts organizations. An in-depth study of grant writing is also a major component. Prerequisite(s): TAAD 2111 Minimum Grade of C.

TAAD 2611 - Arts Administration Practicum

1 Credit Grading mode is S/U

Audience development, educational outreach and marketing within the Freed Center for the Performing Arts. Offered fall and spring semesters. This course may be repeated 2 times. This course is repeatable for a total of 3 hours.

TAAD 3351 - Arts Administration Internship

2 Credits Grading mode is S/U

External work experience in an arts organization. Offered fall and spring semesters. Unlimited repeats permitted.

Subject-Dance (TADN)

TADN 1101 - Introduction to Dance

2 Credits

Ballet, jazz and tap presented to develop the ability to learn basic components and vocabulary of each of these forms. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

TADN 1201 - Ballet I

2 Credits

Designed for the student with little experience in ballet technique. Offered fall and spring semesters. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 1221 - International Folk Dance

1 Credit

Dances from cultures around the world: step and rhythmic patterns, position, and formations of traditional and ethnic group dances. Course Attributes: Diversity-Human Interaction.

TADN 1301 - Modern Dance I

2 Credits

Designed for the student with little experience in modern dance technique. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 1401 - Jazz Dance I

2 Credits

Designed for the student with little experience in jazz dancing. Prerequisite(s): TADN 1201 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

TADN 1501 - Tap Dance I

2 Credits

Designed for the student with little experience in tap dancing. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

TADN 2111 - Social Dance*1 Credit*

Social dance course to include waltz, foxtrot, swing, polka, rhumba, tango, and cha-cha. Emphasis will be placed on rhythm, style and skill development. Course Attributes: Integration Across Disciplines.

TADN 2121 - Dance and Culture*3 Credits*

An investigation of movement and dance as a vehicle for understanding culture through movement and an understanding of the rich diversity of movement via readings, films and discussion. Course Attributes: Non Western Cultural, Fine Arts, Diversity-Human Interaction, Informed Responses-Aesthetics.

TADN 2201 - Ballet II*2 Credits*

For intermediate students with experience in ballet technique. Students must take the prerequisite course or have permission of the instructor. Prerequisite(s): TADN 1201 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

TADN 2301 - Modern Dance II*2 Credits*

For intermediate students with experience in modern technique. Students must take the prerequisite course or have permission of the instructor. Prerequisite(s): TADN 1301 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 2401 - Jazz Dance II*2 Credits*

For intermediate students with experience in jazz dance. Students must take the prerequisite course or have permission of the instructor. Prerequisite(s): TADN 1401 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 2501 - Tap Dance II*2 Credits*

Designed for intermediate students with experience in tap dancing. Students must take the prerequisite course or have permission of the instructor. Prerequisite(s): TADN 1501 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 2601 - Dance Practicum*1 to 3 Credits*

Participation in a collaborative experience with guest artists and choreographers. Open only to students who have auditioned and have been awarded roles in dance productions. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TADN 3201 - Ballet III*2 Credits*

For students with advanced experience in ballet technique. May include pointe work for students with strong technique. Students must take the prerequisite course or have permission of the instructor. Prerequisite(s): TADN 2201 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 3301 - Modern Dance III*2 Credits*

For students with advanced experience in modern technique. Students must take the prerequisite course or have permission of the instructor. Prerequisite(s): TADN 2301 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 3401 - Jazz Dance III*2 Credits*

For students with advanced experience in jazz dance. Students must take the prerequisite course or have permission of the instructor. Prerequisite(s): TADN 2401 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 3501 - Tap Dance III*2 Credits*

For students with advanced experience in tap dance. Students must take the prerequisite course or have permission of the instructor. Prerequisite(s): TADN 2501 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines, Requires Instructor Approval.

TADN 3601 - Dance History*3 Credits*

From the Middle Ages through present times, an historical survey of the origins, growth, and development of theatrical dance. Focus on the forces, processes, and personalities that influenced dance. Offered alternate fall semesters. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 3611 - Musical Theatre Dance Styles I*2 Credits*

The study and recreation of historical musical theatre dance and related social dances influencing Broadway stage choreography. Students must meet the pre-requisites or have permission of the instructor. Prerequisite(s): TADN 1201 or TADN 1301. Must be enrolled in one of the following Fields of Study: Dance, Musical Theatre. Course Attributes: Fine Arts.

TADN 4201 - Ballet IV Pointe*2 Credits*

Techniques of pointe work at the barre and center work. Offered alternate fall semesters. Prerequisite(s): TADN 3201 Minimum Grade of C. This course may be repeated 1 time. Course Attributes: Fine Arts, Informed Responses-Aesthetics, Integration Across Disciplines.

TADN 4601 - Dance Composition*3 Credits*

Principles general to choreographic compositional styles and their application via compositional projects and in-class explorations. Offered alternate spring semesters. Prerequisite(s): TADN 2201 Minimum Grade of C or TADN 2301 Minimum Grade of C or TADN 2401 Minimum Grade of C. Course Attributes: Fine Arts, Effective Communication Non-Writing, Informed Responses-Aesthetics.

TADN 4611 - Musical Theatre Dance Styles II*2 Credits*

A continuation of Musical Theatre Dance Styles I. The study and recreation of historical musical theatre dance and related social dances influencing Broadway stage choreography. Must be enrolled in one of the following Fields of Study: Dance, Musical Theatre. May not be enrolled in one of the following Classifications: Freshman. Course Attributes: Fine Arts.

Subject –International Theatre Production (TADP)**TADP 2001 - Portfolio Review I***0 Credits Grading mode is S/U*

Theatre Production students are required to present an updated portfolio and resume of production and course work at a formal portfolio review session at the end of each year enrolled. The faculty will advise the student to continue in their degree or select another degree program in the University. Must be enrolled in one of the following Fields of Study: Theatre Design and Production. Must be enrolled in one of the following Classifications: Freshman, Sophomore. This course may be repeated 1 time.

TADP 2111 - Fundamentals of Stagecraft*3 Credits*

Theoretical and practical work in the fundamentals of technical theatre production. Content includes scenic construction, property construction, theatrical rigging, basic drafting, and basic design theory. Offered fall semesters. Course Attributes: Fine Arts.

TADP 2121 - Fundamentals of Lighting and Sound*3 Credits*

Theoretical and practical work in the fundamentals of lighting and sound production. Content includes stage lighting, sound theory for live reinforcement and recorded sound effects. Offered spring semester. Course Attributes: Fine Arts.

TADP 2131 - Fundamentals of Costuming*3 Credits*

Theoretical and practical work in the hand sewing, draping and drafting of patterns for basic garments, various problems of layout and cutting, and specialized sewing techniques for costumes. Offered alternate fall semesters. Course Attributes: Fine Arts.

TADP 2151 - Make-up*2 Credits*

Methods and practice in the creation and application of stage makeup. Students may comprise makeup crews for University Theatre and Studio Theatre productions. Offered spring semester. Course Attributes: Fine Arts.

TADP 2551 - Technical Direction*3 Credits*

Technology, organization, and operation of the theatrical scene shop centered around the proper and safe use of tools, the choosing of materials, and methods of construction. Offered alternate fall semesters. Course Attributes: Fine Arts.

TADP 2571 - Shop Practicum*1 to 3 Credits*

Participation in a collaborative laboratory experience working in the scene or costume shop for University productions. More than six hours may apply towards graduation only for Theatre majors. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TADP 2601 - Stage Management*3 Credits*

Principles and practices of stage management and logistical organization of commercial and non-commercial theatre. Content includes scheduling, pre-production planning, auditions, rehearsals, performance procedures, budgeting, company organization and structure. Offered spring semester. Course Attributes: Fine Arts.

TADP 2651 - Stage Management Practicum*1 to 3 Credits*

Participation in a collaborative laboratory experience working as a stage manager, assistant stage manager or company manager for University productions. More than six hours may apply toward graduation only for Theatre Arts majors. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TADP 2751 - Introduction to Design*3 Credits*

Introduction to theory and practice of theatrical design, text analysis and the ways a production concept and visual metaphor can be communicated in the design of scenery, costumes and lighting. Offered alternate fall semesters. Course Attributes: Fine Arts.

TADP 2761 - Production Practicum*1 to 3 Credits*

Participation in a collaborative laboratory experience which involves serving on a crew for University productions. More than six hours may apply toward graduation only for Theatre Arts majors. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TADP 3351 - Internship in Theatre Design and Production*1 to 12 Credits*

A skills course blending classroom theory with practical experience through working in an outside organization. Offered fall and spring semesters. This course is repeatable for a total of 12 hours. Course Attributes: Requires Department Approval.

TADP 3501 - Advanced Stagecraft*3 Credits*

Advanced construction principles and techniques applied to stage scenery and design. Advanced woodworking, rigging and welding are possible topics covered. Offered alternate spring semesters. Prerequisite(s): TADP 2111 Minimum Grade of C. Course Attributes: Fine Arts.

TADP 3551 - Topics in Theatre Technology*3 Credits*

The principle technical elements of theatre including technical problem solving, scene painting, welding, and graphic solutions to technical theatre. Offered alternate spring semesters. Prerequisite(s): TADP 2111 Minimum Grade of C and TADP 2121 Minimum Grade of C and TADP 3501 Minimum Grade of C. This course may be repeated 2 times. This course is repeatable for a total of 9 hours. Course Attributes: Fine Arts.

TADP 3751 - Topics in Theatre Design*3 Credits*

The principle design elements of theatre including but not limited to scenic, costume, lighting and sound. One type of design explored each semester. Prerequisite(s): TADP 2751 Minimum Grade of C. This course may be repeated 2 times. This course is repeatable for a total of 9 hours. Course Attributes: Fine Arts, Requires Instructor Approval.

TADP 3761 - Advanced Production Practicum*1 to 3 Credits*

Participation in a collaborative laboratory experience which focuses on the supervision and execution of lights, sound, scenic, costumes or props for University productions. More than six hours may apply toward graduation only for Theatre Arts majors. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TADP 3781 - Design Practicum*1 to 3 Credits*

Participation in a collaborative laboratory experience which focuses on the design of lights, sound, scenic, costumes or props for University productions. More than six hours may apply toward graduation only for Theatre Arts majors. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TADP 4001 - Portfolio Review II*0 Credits Grading mode is S/U*

Theatre Production students are required to present an updated portfolio and resume of production and course work at a formal portfolio review session at the end of each year enrolled. Upon completion of the final semester, students shall present their work at an exit portfolio presentation; all accumulated design and/or production work completed while enrolled in the B.F.A. program shall be presented. Offered spring semester. Prerequisite(s): TADP 2001 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: International Theatre Production, Theatre Design and Production. Must be enrolled in one of the following Classifications: Junior, Senior. This course may be repeated 2 times.

TADP 4951 - Theatre Design and Production Capstone*2 Credits*

An advanced production project which integrates skills and experiences acquired during the completion of the major concentration. Permission of advisor and completion of project abstract. A graduating senior survey must be completed to receive credit for this course. Must be enrolled in one of the following Fields of Study: International Theatre Production, Theatre Design and Production. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Fine Arts, Critical and Creative Thinking, Effective Communication Writing, Requires Instructor Approval.

Subject-Musical Theatre (TAMT)**TAMT 2101 - Musical Theatre History & Literature***3 Credits*

The history of American Musical Theatre, its origins, and development through the 20th century, covering Broadway and film musicals, as well as the famous and historical figures of Broadway.

TAMT 2601 - Musical Theatre Performance Practicum*1 Credit*

Participation in a collaborative rehearsal experience. Open only to students who have auditioned for and been awarded roles in University mainstage or studio theatre productions. A repeatable course but only 4 hours apply toward the major. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TAMT 2611 - Musical Theatre Pit Orchestra Practicum*1 Credit*

Participation in a collaborative rehearsal experience. Open only to students who have been invited to perform in the pit orchestra of a University mainstage or studio theatre production. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TAMT 2951 - Musical Theatre Sophomore Hearing*0 Credits Grading mode is S/U*

An assessment procedure typically performed at the end of the second year spring semester. Students prepare monologues and song material for presentation and evaluation including dance assessment. Offered spring semester. Prerequisite(s): MUSC 1051 Minimum Grade of C or TADN 1201 Minimum Grade of C or TADN 1301 Minimum Grade of C and MUSL 2111A Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Communication Arts/Musical Theatre, Musical Theatre, Theatre. Must be enrolled in one of the following Classifications: Sophomore, Junior. Course Attributes: Requires Instructor Approval.

TAMT 3351 - Internship in Musical Theatre*1 to 12 Credits Grading mode is S/U*

Working in an external organization having the opportunity to blend classroom theory and practical experience. Offered fall and spring semesters. Prerequisite(s): TAMT 2951 Minimum Grade of S. Must be enrolled in one of the following Fields of Study: Communication Arts/Musical Theatre, Communication Arts/Theatre, Musical Theatre, Theatre. Must be enrolled in one of the following Classifications: Junior, Senior. This course may be repeated 11 times. This course is repeatable for a total of 12 hours. Course Attributes: Requires Instructor Approval.

TAMT 3501 - Musical Theatre Audition Techniques*2 Credits*

Prepares students for the musical theatre profession by exploring the skills and knowledge required for casting. This course focuses on audition techniques, selecting and interpreting audition material, and researching the resources available to actors seeking work in the professional theatre. Offered alternate spring semesters. Prerequisite(s): TATH 2401 Minimum Grade of C and TATH 2751 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Communication Arts/Musical Theatre, Communication Arts/Theatre, Musical Theatre, Theatre. May not be enrolled in one of the following Classifications: Freshman. This course may be repeated 2 times. This course is repeatable for a total of 6 hours.

TAMT 4501 - Acting Styles for Musical Theatre*3 Credits*

A scene study class geared toward an understanding of the range of acting techniques used specifically in musical theatre from vaudeville to contemporary and modern musicals. Offered alternate spring semesters. Prerequisite(s): TAMT 2951 Minimum Grade of S and TAMT 3501 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Communication Arts/Musical Theatre, Communication Arts/Theatre, Musical Theatre, Theatre. Must be enrolled in one of the following Classifications: Junior, Senior. This course may be repeated 2 times. This course is repeatable for a total of 6 hours.

TAMT 4951 - Musical Theatre Capstone*2 Credits Grading mode is S/U*

The capstone experience for senior musical theatre majors centers on a practical project, which demonstrates proficiency in performance skills and preparation for graduate study or entry into the profession. Course is two semesters in length. Prerequisite(s): TAMT 2951 Minimum Grade of S. Must be enrolled in one of the following Fields of Study: Communication Arts/Musical Theatre, Communication Arts/Theatre, Musical Theatre, Theatre. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

Subject – Theatre Arts (TATA)**TATA 1001 - Orientation***0 Credits Grading mode is S/U*

Familiarization with the departmental requirements for majors, planning a program of courses, university catalog and library. Required of departmental majors. Offered fall semester. Must be enrolled in one of the following Fields of Study: Communication Arts/Musical Theatre, Communication Arts/Theatre, International Theatre Production, Musical Theatre, Theatre, Theatre Design and Production.

TATA 1901 - Special Topics in Theatre Arts*1 to 3 Credits*

Course may be repeated as topics vary, but only 24 hours will count toward graduation. Offered fall and spring semesters. Unlimited repeats permitted.

TATA 2901 - Special Topics in Theatre Arts*1 to 3 Credits*

Course may be repeated as topics vary, but only 24 hours will count toward graduation. Offered fall and spring semesters. Unlimited repeats permitted.

TATA 2991 - Independent Study in Theatre Arts*1 to 3 Credits*

A topic in Communication and Theatre Arts that is of particular interest to the student. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

TATA 3901 - Special Topics in Theatre Arts*1 to 3 Credits*

Course may be repeated as topics vary, but only 24 hours will count toward graduation. Unlimited repeats permitted.

TATA 4901 - Special Topics in Theatre Arts*1 to 3 Credits*

Course may be repeated as topics vary, but only 24 hours will count toward graduation. Offered fall and spring semesters. Unlimited repeats permitted.

TATA 4991 - Independent study in Theatre Arts*1 to 3 Credits*

A topic in Communication and Theatre Arts that is of particular interest to the student. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject-Theatre (TATH)**TATH 1051 - Introduction to the Performing Arts***3 Credits*

An introduction to theatre through the study of its origin and development, and its contemporary theory and practice. For the nonmajor. Includes lecture, play attendance and production experience. Offered fall and spring semesters. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

TATH 1901 - Special Topics in Theatre Arts*1 to 3 Credits*

Course may be repeated as topics vary, but only 24 hours will count toward graduation. Offered fall and spring semesters. Unlimited repeats permitted.

TATH 1911 - ST-Summer Honors Institute*1 Credit Grading mode is S/U*

Special Topics in Theatre. Enrollment is restricted to Summer Honors Institute attendees only. Unlimited repeats permitted. Course Attributes: Dept of Theatre Arts, Requires Instructor Approval.

TATH 2401 - Voice and Speech*2 Credits*

An exploration of the voice as an organ and as a means of expression. Vocal technique is developed through exercises which expand breath, range and resonance while speech is enhanced through the exploration and expression of dramatic text. Offered spring semester. Prerequisite(s): TATH 2601 or TATH 2591. This course may be repeated 2 times. This course is repeatable for a total of 4 hours. Course Attributes: Fine Arts, Effective Communication Non-Writing.

TATH 2501 - Movement for the Actor*1 Credit*

Enhances the actor's instrument through development of physical expression and character work. Techniques include but are not limited to: Alexander, Laban, Feldenkrais, Chekhov, and physical training such as yoga, pilates and tai chi. Offered spring semester.

TATH 2591 - Acting for Non-Majors*2 Credits*

The fundamentals of stage acting through exercises, readings, discussions and scene study, for the student not majoring in performance. Offered spring semester. May not be enrolled in one of the following Fields of Study: Communication Arts/Musical Theatre, Communication Arts/Theatre, Musical Theatre, Theatre. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

TATH 2601 - Introduction to Acting*2 Credits*

The fundamentals of stage acting through exercises, readings, discussion, and scene study. The beginning actor learns to play actions, utilize activity, identify objectives and obstacles, and incorporate them all into performance. Must be enrolled in one of the following Fields of Study: Communication Arts/Musical Theatre, Communication Arts/Theatre, Musical Theatre, Theatre. This course may be repeated 2 times. This course is repeatable for a total of 4 hours. Course Attributes: Fine Arts.

TATH 2611 - Theatre Performance Practicum*1 to 3 Credits*

Participation in a collaborative performance experience. Open only to students who have auditioned for and have been awarded roles in University mainstage or studio theatre productions. Offered fall and spring semesters. Unlimited repeats permitted.

TATH 2751 - Play Analysis*3 Credits*

A study of the play from page to stage with an emphasis on critical analysis of structure, style, theme, character, language, dramatic event, and the perspectives of the actor, director, critic, and audience. Offered fall semester. Course Attributes: Fine Arts, Informed Responses-Aesthetics.

TATH 2901 - Special Topics in Theatre Arts*1 to 3 Credits*

Course may be repeated as topics vary, but only 24 hours will count toward graduation. Offered fall and spring semesters. Unlimited repeats permitted.

TATH 2911 - World Theatre History I*3 Credits*

A survey of the history and social impact of the theatre in Western and non-Western cultures from ancient times to the Renaissance. Offered fall semester. Course Attributes: Fine Arts, Effective Communication Writing, Informed Responses-Aesthetics.

TATH 2921 - World Theatre History II*3 Credits*

A survey of the history and social impact of the theatre in Western and non-Western cultures from the Renaissance to the 19th Century. Offered spring semester. Course Attributes: Fine Arts, Effective Communication Writing, Informed Responses-Aesthetics.

TATH 2991 - Independent Study in Theatre Arts*1 to 3 Credits*

A topic in Theatre Arts that is of particular interest to the student. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

TATH 3001 - Symposium*0 Credits Grading mode is S/U*

Workshop with visiting theatre professionals which may include stage directors, designers, choreographers, and professional performers. Repeatable with different topics. Students must complete 1 course per semester. Offered Fall and Spring semesters. Must be enrolled in one of the following Fields of Study: Arts Administration, Communication Arts/Arts Administration, Communication Arts/Musical Theatre, Communication Arts/Theatre, International Theatre Production, Musical Theatre, Theatre, Theatre Arts/Arts Administration, Theatre Design and Production. Unlimited repeats permitted.

TATH 3351 - Internship in Theatre*1 to 12 Credits*

Blends classroom theory with practical experience through working in an external organization. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Communication Arts, Communication Arts/Musical Theatre, International Theatre Production, Musical Theatre, Theatre, Theatre Design and Production. May not be enrolled in one of the following Classifications: Freshman. This course may be repeated 11 times. This course is repeatable for a total of 12 hours. Course Attributes: Requires Instructor Approval.

TATH 3501 - Stage Combat*2 Credits*

An introduction to the fundamentals of stage combat including but not limited to unarmed and rapier/dagger. Offered alternate years. Prerequisite(s): TAMT 2951 Minimum Grade of C. This course may be repeated 1 time. This course is repeatable for a total of 4 hours. Course Attributes: Fine Arts.

TATH 3521 - Dramaturgy Practicum*1 Credit*

This course is a practicum experience for which a student serves as dramaturg for a University mainstage or studio theatre production with faculty advising. This course may be repeated 4 times. This course is repeatable for a total of 4 hours. Course Attributes: Requires Instructor Approval.

TATH 3601 - Acting II: Scene Study Intensive*3 Credits*

A scene study intensive that expounds upon the techniques acquired in Intro. to Acting, TATH 2601. The actor now learns to apply acting skills to the development of a role in a scripted play with greater emphasis on the character and its throughline. Prerequisite(s): TATH 2601 Minimum Grade of C. Must be enrolled in one of the following Fields of Study: Musical Theatre, Theatre. This course may be repeated 1 time. Course Attributes: Fine Arts, Requires Instructor Approval.

TATH 3621 - Directing Practicum*1 to 3 Credits*

Participation in a collaborative directorial experience that focuses on directing a University mainstage or studio theatre production with faculty advising. Prerequisite(s): TATH 3861 Minimum Grade of C. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

TATH 3651 - Acting III: Shakespeare*3 Credits*

An exploration of the works of the world's most celebrated playwright, this course develops an understanding of Shakespeare's language, rhetoric and performance techniques through sonnets, monologues, scene study and demonstration. Offered fall semester. Prerequisite(s): TATH 2401 Minimum Grade of C and TATH 2601 Minimum Grade of C and TATH 3601 Minimum Grade of C. This course may be repeated 2 times. This course is repeatable for a total of 6 hours. Course Attributes: Fine Arts, Intergrade Across Disciplines.

TATH 3801 - Topics in Theatre History/Dramatic Literature

3 Credits

Major topics in theatre history and/or dramatic literature including but not limited to: 20th-century theatre, issues in contemporary theatre, Irish theatre, contemporary women playwrights. May be repeated with different topic. Prerequisite(s): TATH 2751 Minimum Grade of C. This course may be repeated 2 times. This course is repeatable for a total of 9 hours. Course Attributes: Fine Arts.

TATH 3821 - Playwriting

3 Credits

A writing workshop designed to introduce students to the basic building blocks of writing for the stage, including: plot, character, dialogue, setting and dramatic action. Offered alternate fall semesters. Course Attributes: Fine Arts.

TATH 3861 - Directing

3 Credits

Methods, theories, exercises, and practices in directing and presenting dramatic scenes. Offered fall semester. Prerequisite(s): TATH 2601 Minimum Grade of C. May not be enrolled in one of the following Classifications: Freshman. Course Attributes: Fine Arts.

TATH 3901 - Special Topics in Theatre Arts

1 to 3 Credits

Course may be repeated as topics vary, but only 24 hours will count toward graduation. Offered fall and spring semesters. Unlimited repeats permitted.

TATH 3911 - American Theatre History

3 Credits

A historical survey of American theatre and popular entertainment forms from the colonial period through the rise of realism and contemporary theatre. Offered alternate spring semesters. Prerequisite(s): TATH 2751 Minimum Grade of C. Course Attributes: Fine Arts, Integration Across Disciplines.

TATH 4451 - Business of Theatre

1 Credit

Prepares students for a career in the professional theatre by teaching the skills and knowledge needed for gaining employment and for good career management. Topics include audition/portfolio materials, audition techniques and resources for various professional markets. Offered spring semester. Must be enrolled in one of the following Fields of Study: Arts Administration, Musical Theatre, Theatre, Theatre Design and Production. Must be enrolled in one of the following Classifications: Junior, Senior.

TATH 4601 - Acting IV: Styles of Acting

3 Credits

A scene study course focusing on specific performance techniques of genres beyond American realism. The material practiced includes playwrights such as Chekhov, Beckett, Wilde, Moliere, Pinter and Ionesco. Offered alternate spring semesters. Prerequisite(s): TATH 3601 Minimum Grade of C and TATH 2401 Minimum Grade of C. Course Attributes: Fine Arts, Diversity-Human Interaction, Informed Responses-Aesthetics.

TATH 4851 - Dramatic Criticism and Production Analysis

3 Credits

The director and dramaturg's analysis of a play in preparation for production. Theories/approaches considered include: action structures, character-based analysis, epic theatre, feminism, and semiotics. Offered alternate spring semesters. Prerequisite(s): TATH 2751 Minimum Grade of C. Course Attributes: Fine Arts.

TATH 4901 - Special Topics in Theatre Arts

1 to 3 Credits

Course may be repeated as topics vary, but only 24 hours will count toward graduation. Offered fall and spring semesters. Unlimited repeats permitted.

TATH 4951 - Senior Capstone

1 to 3 Credits

A production/performance based project that serves as the senior capstone for the Theatre major. Must be enrolled in one of the following Fields of Study: Communication Arts/Theatre, Theatre. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing, Requires Instructor Approval.

TATH 4991 - Independent Student in Theatre Arts

1 to 3 Credits

A topic in Theatre Arts that is of particular interest to the student. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.



THE JAMES F. DICKE COLLEGE OF

Business Administration

Business Administration

James W. Fenton, Jr., *Dean*

Professors Fenton, Kleine (*Associate Dean*), Woods; **Associate Professors** Christopher, Ewing, McClough, Morgan, Savino, Schertzer; **Assistant Professors** Franquesa, Kim, Kochan, Kutch, McHugh, Phillips, T. Schakett, H. Wilson, Wang, Zhang; **Visiting Assistant Professor** Ryman; **Visiting Instructor** S. Schakett.

James F. Dicke Professor of Marketing

The James F. Dicke Professor of Marketing, endowed by James F. Dicke, has been established beginning with the academic year 2014-15. The recipient of this endowed professorship is Robert Kleine, professor of marketing.

Patton Chair

The George Willard Patton Chair of Business and Economics, endowed by the Richard King Mellon Charitable Trust of Pittsburgh, Pennsylvania, has been established beginning with the academic year 1973-74. The 2014-15 recipient of this endowed professorship is David Savino, associate professor of management.

Vision Statement

The James F. Dicke College of Business Administration will be known for developing leaders through its involved, innovative and inclusive approach to management education.

Mission Statement

Develop business and civic leaders for a changing world.

Supporting Values

Ethical

We are honest and transparent in our interactions with others. We believe that integrity is the foundation of business and civic leadership.

Entrepreneurial

We are collaborative, innovative, and embrace opportunity. We believe that vision and persistence produce innovation.

Engaged

We are active contributors to our academic, civic, and global communities. We believe that developing leaders requires mentoring, experiential learning, and scholarship.

Admissions Standards

Candidates seeking admission to the James F. Dicke College of Business Administration are required to meet the general requirements for admission to the University. The College of Business Administration accepts high school graduates who have 16 acceptable units of high school credits. Thirteen of these units are prescribed as follows: Four units of English; three units of mathematics (including algebra and geometry); six units in history, social studies, language, or natural science, or any combination thereof. Candidates are encouraged to pursue a foreign language while in high school. Acceptable scores on the American College Test or the College Entrance Examination Board Test are expected of all candidates.

Transfer Students The Dicke College of Business Administration welcomes students from other accredited colleges and universities. Applications for transfer will be considered only if the student has a prior minimum grade point average 2.00 on a 4.00 scale, and the student is eligible to return to his/her former institution.

Students transferring from a two-year associate degree program are advised that courses in advanced business subjects (i.e., offered at the college's 3000 or 4000 level) taken at a two-year institution are not normally granted credit as equivalents of the business courses taught at Ohio Northern University. Such courses can be accepted as general electives. Under certain circumstances, students could establish equivalent credit through college-administered proficiency tests.

3+3 BSBA and JD Dual Degree Path

The 3+3 Business Law Program, jointly sponsored by the James F. Dicke College of Business Administration and the Pettit College of Law, allows outstanding students to complete all requirements for both a baccalaureate degree in business administration and the Juris Doctor Degree in six years, as opposed to the traditional seven-year period of study. Students with an ACT composite of 27 or higher (or equivalent SAT score) and a high school accumulative GPA of 3.60 or higher are eligible to apply for the 3+3 Program. Qualified and interested students should contact the Dicke College Dean's office (business@onu.edu) prior to Summer orientation to express interest in the 3+3 Program. A student must declare a qualifying major on entry into the College. Qualifying majors offered in this accelerated program are Accounting, Management, Marketing, and Risk Management and Insurance. Students apply for admission to the Pettit College of Law during their third year. The first semester of the Law program provides the final 15 credit hours required of the BSBA degree. For more information, see the fuller description on page 22.

Pre-law Program

Business students interested in the Pre-law Program will find a complete description on page 22 of this catalog.

Three Year BSBA Express Path

Qualified students can opt to participate in the Dicke College's three year accelerated degree program. Students with an ACT composite of 27 or higher (or equivalent SAT score) and a high school GPA of 3.60 or higher are eligible to apply for the Express Path program. Qualified and interested students should contact the Dicke College Dean's office (business@onu.edu) prior to Summer orientation to express interest in the Express Path Program. A student must declare a qualifying major on entry into the College. Qualifying majors offered in this accelerated program are Accounting, Management, Marketing, and Risk Management and Insurance. Students opting for this accelerated program must understand that the program requires completing courses year round (including summers), and will likely preclude them from fully participating in some extra-curricular activities while at the University. Some of the courses will be available via distance education. Students enrolled in Express Path will receive priority when scheduling their courses to ensure that they can complete the program in a timely manner.

Dual Degree Programs

Information concerning dual degree programs involving the College of Business Administration appears on page 22 of this catalog. Students may receive further details in the office of the dean of the college.

Bachelor of Science in Business Administration (BSBA) Degree Requirements

The Bachelor of Science in Business Administration degree is an undergraduate degree that provides a foundation in the business disciplines of accounting, business law, economics, finance, international business, management, marketing and personal computer applications as well as a comprehensive understanding in the student's chosen major area. This program prepares students to successfully enter either the business world or a graduate course of study.

This program requires a minimum of 120 semester hours of study including general education requirements, business administration core course requirements and additional requirements for the specific majors.

General Education Requirements

Undergraduate students must, in addition to all other graduation requirements, complete the university general education program to graduate from Ohio Northern University. Those requirements are outlined on page 21 of this catalog. Within the context of the university general education program, several specific courses are required for students pursuing a Bachelor of Science in Business Administration:

1. One additional English elective beyond the required Writing Seminar
2. Statistics for Professionals 1 and 2 (STAT 1561 and 2561)
3. Presentational Speaking (CAMS 1301)
4. Two Aesthetic Appreciation courses (or two general education aesthetic appreciation tags).

Business Planning (BIZ Core) Courses

The James F. Dicke College of Business Administration core curriculum provides an integrated four-year experience themed around strategic business planning. The business planning core culminates in a year long integrated business planning senior capstone experience that is interdisciplinary in nature.

BIZ 1001	Free Enterprise and Business Planning	3 hrs.
BIZ 1201	Ethics for Business Planning	3 hrs.
	Demonstrate proficiency with software tools (see General Regulation 10, below)	
BIZ 2021	Microeconomic foundations for Business Planning	3 hrs.
BIZ 2031	Macroeconomic Foundations for Business Planning	3 hrs.
BIZ 2101	Accounting Foundations for Business Planning	3 hrs.
BIZ 2131	Legal Environment for Business Planning	3 hrs.
BIZ 2331	Behavioral Management for Business Planning	3 hrs.
BIZ 2401	Information Systems for Business Planning	3 hrs.
BIZ 2511	Marketing for Business Planning	3 hrs.
BIZ 2801	Career Planning and Preparedness	3 hrs.
BIZ 3001	Global Environment for Business Planning	3 hrs.
BIZ 3621	Financial Analysis for Business Planning	3 hrs.
BIZ 3641	Quantitative Management for Business Planning	3 hrs.
BIZ 3991	BIZ LAB 2	1 hr.
BIZ 4851	Integrated Business Planning 1	2 hrs.
BIZ 4852	Business Planning Lab	1 hr.
BIZ 4861	Integrated Business Planning 2	1 hr.

And a professional engagement experience appropriate to the major:

BIZ 4911	Internship in Accounting	1 hr.
BIZ 4941	Internship in Management	1 hr.
BIZ 4951	Internship in Marketing	1 hr.
BIZ 4961	Internship in Pharmaceutical Business	1 hr.
BIZ 4971	Internship in Risk Management and Insurance	1 hr.

SPECIFIC MAJORS AND MAJOR COURSE REQUIREMENTS

Beyond the general education requirements and the BIZ Core, students must also complete specific requirements in their major areas.

The College of Business Administration offers five major areas of study: accounting, management, marketing, pharmaceutical business, and risk management and insurance.

Bachelor of Science in Business Administration Accounting Major

The accounting major offers a four-year (120 semester hour) degree program that prepares students for many entry-level accounting positions. Depending on selected elective courses, students completing the accounting major may have the necessary educational requirements for the Certified Management Accounting (CMA) and the Certified Internal Auditing (CIA) examinations.

The Accounting Major curriculum includes the general education requirements (above), the BIZ Core courses (above) plus the following coursework:

ACCT 2201	Accounting Foundations 2	3 hrs.
ACCT 3011	Intermediate Financial Accounting 1	3 hrs.

ACCT 3021	Intermediate Financial Accounting 2	3 hrs.
ACCT 3141	Intermediate Managerial Accounting 1	3 hrs.
ACCT 3151	Intermediate Managerial Accounting 2	3 hrs.
ACCT 3031	Auditing 1	3 hrs.
ACCT 3871	Taxation 1	3 hrs.
ACCT	Accounting Elective	3 hrs.

Students interested in pursuing the CMA designation should select the Accounting Elective from the following courses: Managerial Economics (IBEC 3831), Intermediate Finance (FINC 3691), or Investments (FINC 4611). Students interested in pursuing the CMA designation are strongly encouraged to also complete the Finance minor.

Students interested in pursuing the CPA license should select as their Accounting Elective Current Topics in Accounting (ACCT 4021), Auditing II (ACCT 4041) or Taxation II (ACCT 4871), and are encouraged to use the two electives not selected as general electives.

CPA Program

In many states including Ohio, students planning to sit for the Certified Public Accounting (CPA) examination will have to have earned 150 semester hours of academic credit; have course coverage in specified accounting areas; and a specified number of upper-level accounting courses or pursuing the Dicke College's Master of Professional Practice in Accounting (MPPA) degree. MPPA program details can be found below. Students should consult with their academic advisors and their State Boards of Accountancy for specific course and degree requirements for the CPA exam.

Bachelor of Science in Business Administration Management Major

The Management Major curriculum includes the general education requirements (above), the BIZ Core courses (above) plus the following coursework:

MGMT 3341	Cases & Exercises in Organizational Behavior	3 hrs.
MGMT 3631	Human Resource Mgmt.	3 hrs.
MGMT 3751	Management Decision Making	3 hrs.
MGMT 4861	International Management	3 hrs.
MGMT	Management Electives	9 hrs.

Bachelor of Science in Business Administration Marketing Major

The Marketing Major curriculum includes the general education requirements (above), the BIZ Core courses (above) plus the following coursework:

MRKT 3341	Marketing Research	3 hrs.
MRKT 3521	Consumer Behavior	3 hrs.
MRKT 3631	Product Development	3 hrs.
MRKT 4711	Sales & Customer Relationship Management	3 hrs.
MRKT 4731	Supply Chain Management	3 hrs.
MRKT	Marketing Electives	6 hrs.

Bachelor of Science in Business Administration Pharmaceutical Business Major

The Pharmaceutical Business Major prepares students for careers in the business of healthcare. The curriculum for the major includes the general education requirements (above), the BIZ Core courses (above), the pharmaceutical business required courses (below) and courses for one of five concentration areas: accounting, business analytics, marketing, human resource management, manufacturing management, or marketing.

Pharmaceutical business classes required of all Pharmaceutical Business majors:

BIOL 1101	Principles of Human Biology	3 hrs.
BIOL 2311	Anatomy & Physiology 1	3 hrs.
CHEM 1201	Chemistry for Health Sciences	5 hrs.
PHBU 1001	Introduction to the Health Care System 1	1 hrs.
PHBU 2001	Introduction to the Health Care System 2	1 hrs.
	(Students entering after the freshman year may substitute PHPR 2411 or PHPR 2421 Contemporary Pharmacy Practice for PHBU 1001 and 2001).	

PHBU 3051	Introduction to Health Sciences for Business Professionals	3 hrs.
PHBU 4011	Health Care Economics, Finance, and Regulation 1	3 hrs.
PHBU 4021	Health Care Economics, Finance, and Regulation 2	3 hrs.

Additional courses for pharmaceutical business majors pursuing the accounting concentration include:

ACCT 2201	Accounting Foundations 2	3 hrs.
ACCT 3031	Intermediate Financial Accounting 1	3 hrs.
ACCT 3021	Intermediate Financial Accounting 2	3 hrs.
ACCT 3141	Intermediate Managerial Accounting 1	3 hrs.
ACCT 3031	Auditing 1	3 hrs.
ACCT 3871	Taxation 1	3 hrs.

Additional courses for pharmaceutical business majors pursuing the business analytics concentration include:

MRKT 3541	GIS for Marketing	3 hrs.
PHBU 3341	Marketing Research	3 hrs.
PHBU 3751	Management Decision Making	3 hrs.
PHBU 3831	Business Analytics	3 hrs.
PHBU 4301	Advanced Business Analytics	3 hrs.
	Quantitative Data Analysis Elective	3 hrs.

Additional courses for pharmaceutical business majors pursuing the human resources management concentration include:

MGMT 3631	Human Resource Mgmt.	3 hrs.
PHBU 4151	Compensation Management	3 hrs.
PHBU 4571	Project Management	3 hrs.
PHBU 3751	Mgmt. Decision Making	3 hrs.
PHBU 4121	Health Care Management	3 hrs.
MGMT	Management Elective	3 hrs.

Additional courses for pharmaceutical business majors pursuing the manufacturing management concentration include:

PHBU 3751	Management Decision Making	3 hrs.
PHBU 4121	Health Care Management	3 hrs.
PHBU 4571	Project Management	3 hrs.
TECH 4111	Product Manufacturing	4 hrs.
TECH 4121	Manufacturing Management	3 hrs.
MGMT	Management Elective	3 hrs.

Additional courses for pharmaceutical business majors pursuing the marketing concentration include:

PHBU 3341	Marketing Research	3 hrs.
PHBU 3521	Consumer Behavior	3 hrs.
PHBU 3631	Product Development	3 hrs.
PHBU 4711	Sales & Customer Relationship Management	3 hrs.
PHBU 4731	Supply Chain Management	3 hrs.
MRKT	Marketing Elective	3 hrs.

Bachelor of Science in Business Administration Risk Management and Insurance Major

The risk management and insurance major prepares students for careers in enterprise risk management or insurance. The Management Major curriculum includes the general education requirements (above), the BIZ Core courses (above) plus the following coursework:

RMI 2621	Risk Management and Insurance	3 hrs.
RMI 3211	Life and Health Insurance Fundamentals	3 hrs.
RMI 3241	Property and Liability Insurance Fundamentals	3 hrs.
RMI 3751	Management Decision Making	3 hrs.
RMI 3631	Human Resource Management	3 hrs.
RMI 4151	Compensation Management	3 hrs.
RMI	RMI Elective	3 hrs.

Dual Majors and Minors

No course used to satisfy a major or minor requirement in the college may be counted as a discipline elective in the completion of a second major or minor in the College.

Minors and Minor Course Requirements

The Dicke College of Business Administration offers minors in business administration, entrepreneurship, finance, international business, management, and marketing.

Minor in Business Administration

The Business Administration minor is available only to non-business majors. A "C" grade or higher is required in all courses. A minimum of 15 hours required for the minor must be completed at Ohio Northern University.

ABUS 2221	Principles of Entrepreneurship	3 hrs.
BIZ 2021	Microeconomic Foundations or	
BIZ 2031	Macroeconomic Foundations	3 hrs.
BIZ 2101	Accounting Foundations for Business Planning	3 hrs.
BIZ 2131	Legal Environment for Business Planning	3 hrs.
BIZ 2331	Behavioral Management for Business Planning	3 hrs.
BIZ 2511	Marketing for Business Planning	3 hrs.
BIZ 3621	Financial Analysis for Business Planning	3 hrs.
STAT 2561	Statistics for Professionals II	3 hrs.
TOTAL:		24 hrs.

Minor in Entrepreneurship

The Entrepreneurship minor is available to both business and non-business majors with an interest in new venture creation. Courses to be used to satisfy the elective requirements of the minor must be approved. The elective courses will be related to the student's entrepreneurial interests and will complement his/her academic background. A minimum of 12 hours required for the minor must be completed at Ohio Northern University.

ABUS 2221	Principles of Entrepreneurship	3 hrs.
ABUS 3331	Entrepreneurial Finance or	
BIZ 2021	Accounting Foundations	3 hrs.
BIZ 2511	Marketing for Business Planning	3 hrs.
	One approved Program Elective	3 hrs.
ABUS 4441	New Venture Creation	3 hrs.
Choose one of:		3 hrs.
MGMT 4121	Health Care Management	
MGMT 4741	Small Business Management	
MGMT 4771	Non-profit management	
MRKT 3631	Product Development	
TOTAL		18 hrs.

Minor in Finance

The minor is available to both business and non-business majors. A grade of "C" or higher is required in all of the finance courses. A minimum of 12 hours required for the minor must be completed at Ohio Northern University. Non-business majors are advised that BIZ 2111, 2121 are prerequisites for ACCT 3011, 3141, and BIZ 3621.

ACCT 3011	Intermediate Financial Accounting	
or ACCT 3141	Intermediate Managerial Accounting	3 hrs.
BIZ 3621	Financial Analysis	3 hrs.
FINC 3691	Intermediate Finance	3 hrs.
FINC 4611	Investments	3 hrs.
FINC	Upper level Finance or Accounting electives	6 hrs.
TOTAL		18 hrs.

Minor in International Business

The International business minor is available to both business and non-business majors. A grade of "C" or higher is required in all business courses. A minimum of 12 hours required for the minor must be completed at Ohio Northern University.

BIZ 1001	Free Enterprise for Business Planning or	
ABUS 2221	Principles of Entrepreneurship	3 hrs.
BIZ 2031	Macroeconomic Foundations	3 hrs.
BIZ 3001	Global Environment for Business Planning	3 hrs.
IBEC 3861	Development Economics	3 hrs.
	Approved Electives	6 hrs.
	Approved Int'l Experience	

Pre-approved international business minor electives:

MGMT 4861	International Management	
SOC 2501	Cultural Anthropology	
GEOG 1001	Introduction to Geography	
GEOG 2661	World Regional Geography	
PLSC 3881	International Law and Organizations	
PLSC 1021	Introduction to International Relations	
PLSC 2211	Introduction to Comparative Politics	
TOTAL		18 hrs.

Minor in Management

The Management minor is available to both business and non-business majors. A grade of "C" or higher is required in all of the courses. A minimum of 12 hours required for the minor must be completed at Ohio Northern University. Non-business majors are advised that STAT 1561 or its equivalent is a prerequisite for BIZ 3641.

BIZ 2331	Behavioral Management for Business Planning	3 hrs.
BIZ 3641	Quantitative Management for Business Planning	3 hrs.
MGMT 3341	Cases & Exercises in Organizational Behavior	3 hrs.
MGMT 3631	Human Resource Management	3 hrs.
	Upper level Management electives	6 hrs.
TOTAL		18 hrs.

Minor in Marketing

The minor is available to both business and non-business majors. A grade of "C" or higher is required in all of the marketing courses. A minimum of 12 hours required for the minor must be completed at Ohio Northern University.

BIZ 2511	Marketing for Business Planning	3 hrs.
STAT 1561	Statistics for Professionals 1	3 hrs.
MRKT 3341	Marketing Research	3 hrs.
	Upper level Marketing electives	9 hrs.
TOTAL		18 hrs.

Degree Requirements Bachelor of Science Degree

Bachelor of Science in Business Administration

It is the student's responsibility to assure that all of the graduation requirements for the degree and major(s) sought are satisfied:

1. The university general education requirements.
2. The BIZ Core requirements.
3. The specific major requirements and electives.
4. Satisfactory completion and presentation of a minimum of 10 semester hours of appropriate course work for the specific major(s).
5. A minimum of 18 hours of required business courses at the 3000 or 4000 level to be completed at Ohio Northern University with at least 12 of these hours taken in the student's major.
6. A minimum 2.00 grade point average.
7. A letter grade of "C" or better in all but one course specified in (2) and (3) above.

GENERAL REGULATIONS FOR UNDER-GRADUATE STUDENTS IN THE DICKE COLLEGE OF BUSINESS ADMINISTRATION

1. A student may not register for more than 19 hours of academic course work without the dean's written approval. A normal program consists of 12 to 19 scheduled hours. See page 11 for overload charges beyond 19 credit hours.
2. All students are expected to participate in college program assessment activities.
3. All students are expected to participate in selected college-sponsored service activities that contribute to professional development.
4. A student indicates his/her major choice by completing a declaration of major form available from the Registrar's web page. Faculty advisors assist the student in the planning of his/her major.
5. Each student enrolled in the College of Business Administration is expected to make consistent progress toward completion of the degree requirements of his/her major(s).
6. With the written permission of the instructor and the dean, course prerequisites may be waived.
7. Except where noted in the course descriptions, credit hours earned in repeated courses may be counted only once in the total hours required for graduation.
8. A student not enrolled for one academic year (except on approved academic leave) must meet graduation requirements in the catalog effective for the academic year during which the student reentered.
9. Students must have junior standing or higher to enroll in 300 and 400 level College of Business Administration courses.
10. Not later than the conclusion of the first year in the DCBA, students must provide documentation of proficiency with each element of the standard suite of software productivity tools (email, calendar, word processing, presentation graphics, and spreadsheet). Proficiency documentation may take the form of completing ABUS 2011, Personal Computer Applications for Business with a grade of "C" or higher or by providing certifications of proficiency from approved credentialers. Information about approved certifications is available from the Dean's office.
11. Non-College of Business Administration majors may not accumulate more than 30 hours of credit in business courses without the written approval of the dean of the College of Business Administration.
12. Credit earned in independent study is not normally counted as credit toward a major.
13. Dual Majors and Minors: No course used to satisfy a major or minor requirement in the college may be counted as a discipline elective in the completion of a second major or minor in the College.

S/U Grade Option

Students in the College of Business are not permitted to register for courses on an S/U (Satisfactory/Unsatisfactory) basis. If the course is offered on a graded basis.

Service and Activities Courses

A combined maximum of 15 hours of credit in varsity sports, physical education activity service courses, applied music and music performance courses may be counted for graduation.

Classification of Students

For purposes of classification, the minimum requirement for sophomore standing is 30 semester hours of completed academic work and provide evidence of proficiency with each element of the standard suite of software productivity tools (email, calendar, word processing, presentation graphics, and spreadsheet; see General Regulation #10 above).

Junior standing: a minimum of 60 semester hours of credit including the following courses or their articulated equivalents: BIZ 2021 and 2031; BIZ 2101; STAT 1561 and 2561

Senior standing: a minimum of 90 semester hours of credit and completion of the Business Core.

Academic Standing

A grade point average of 2.00 or higher is required for graduation. If a student's accumulative grade point average falls below 2.00, he/she is placed on academic probation and is not eligible to participate in competitive activities of individuals, teams, or other groups officially designated as representing the University.

Any student on probation whose work for the following semester continues below 2.00 accumulative grade point average will have his/her record reviewed by the Academic Qualifications and Scholarship Committee of the college and may be recommended to the dean for suspension or dismissal from the college. Any student with a semester GPA of 1.00 or lower may be placed on probation or suspended.

Professional Engagement Experience (Internship) Program

Each student must complete a professional engagement experience. Three forms of professional engagement qualify to satisfy this requirement:

1. Internship or Co-Op. The student participates in an internship or co-op within the student's profession. The profession is defined by the declared major. An internship is the most common way to satisfy the professional engagement requirement. The Dicke College has established a nation-wide network of internship opportunities. A student may also propose an internship with an organization outside of the College's established network. The internship or co-op is facilitated and supervised by the Director of Experiential Learning. Junior class standing and approval of the Director of Experiential Learning are required.
2. International experience with a professional project. The student participates in a significant University-sponsored international experience or study abroad program. While participating in this experience the student will network with an organization within their profession as defined by their major. The student will also complete a research project. Students who want to complete their professional experience requirement via an international experience with a professional project must declare their intent, and gain approval from the Director of Experiential Learning, prior to the end of the second semester in the College.
3. Previous professional experience. A student who enters the University with significant prior professional experience can, on enrollment, petition the Dean's office to have that prior professional experience qualify as their required professional engagement (For example, individuals with military experience or international students as part of an articulation agreement or exchange program).

The professional engagement experience may be pursued during the academic year or during the summer. Most students schedule their professional engagement experience to occur during the summer between their junior and senior years. Most professional engagement experiences are paid. The professional engagement experience may be full or part-time.

One credit hour of professional engagement is required for the BSBA degree. A minimum of 150 hours of recorded professional engagement experience is required per credit hour. Up to six (6) semester hours of credit may be earned. Students must be registered for professional engagement credit during the term in which the experience occurs.

Students pursuing two or more majors in the James F. Dicke College of Business Administration must complete a distinct professional engagement experience for each major.

International Business Experience Program

The international business experience program is coordinated by the College's International Experience Committee. Students may participate in study abroad, work abroad, or student exchange. Study abroad may take place at virtually any foreign college or university if the academic program is determined to meet certain standards for transfer of credit.

Students are encouraged to enroll for a full academic year abroad. In some cases, study may occur during the summer or for a lesser period during the academic year.

Work abroad is available to ONU business students in cooperation with the Council on International Educational Exchange. This option may be combined with study abroad or pursued independently during the summer. A special bonus is that such employment may qualify the student to earn up to 15 credits toward graduation through the internship program.

Formal agreements for the exchange of students between Ohio Northern University and several prominent foreign institutions offer many opportunities for business students. These include Glasgow Caledonian University (Scotland), the University of Science and Technology of Lille (France), Robert Schuman University (France), the Plekhanov Economic Academy (Russia), Arnhem Business School (Netherlands), Helsinki School of Economics (Finland), Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Queretaro (Mexico), the University of Aarhus (Denmark), Southern Cross University (Australia), Kansai Gaidai University (Japan) and Hanyang University (Korea). Additional study-abroad experiences have taken place at the University of Havana (Cuba), Copenhagen Business School (Denmark), University of Lüneburg (Germany), University of Turin (Italy), the London School of Economics (England), and Queensland University (Australia).

Students with a foreign language background are likely to find that they have more opportunity to take advantage of these programs. All business students therefore are strongly advised to continue their foreign language study at ONU. Those who have no prior course work in foreign language are encouraged to incorporate such courses into their undergraduate studies.

COLLEGE OF BUSINESS ADMINISTRATION

Subject - General Business (ABUS)

ABUS 1901 - Special Topics in Business

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

ABUS 1911 - ST-Young Women's Leadership Experience

1 Credit Grading mode is S/U

Topics in the Business and Entrepreneurship fields. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ABUS 2011 - Personal Computer Applications for Business

3 Credits

Business applications for microcomputers. Introductory level use of software for word processing, file management, spreadsheets, and graphics. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Business Administration, Arts and Sciences. Must be enrolled in one of the following Major fields of study: Accounting, Finance, International Business & Economics, Management, Marketing, Mathematical Statistics, Pharmaceutical Business, Risk Management and Insurance. Course Attributes: Effective Communication Non-Writing.

ABUS 2221 - Principles of Entrepreneurship

3 Credits

Entrepreneurship and new venture creation. Offered fall and spring semesters. Course Attributes: Diversity-Human Interaction, Effective Communication Non-Writing, Informed Ethical Responses.

ABUS 2901 - Special Topics in Business

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

ABUS 3331 - Entrepreneurial Finance

3 Credits

Basic financial and accounting concepts; financial planning; obtaining finance; use and analysis of financial statements; cash flow management and budgeting in a new venture or entrepreneurial organization. Prerequisite(s): ABUS 2221. May not be enrolled in one of the following Colleges: Business Administration. Must be enrolled in one of the following Minor fields of study: Entrepreneurship. Course Attributes: Critical and Creative Thinking, Informed Ethical Responses.

ABUS 3901 - Special Topics in Business*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

ABUS 4441 - New Venture Creation*3 Credits*

Capstone course for the Entrepreneurship minor. Develop a business plan to support the launch of a new business venture. Offered fall and spring semesters. Prerequisite(s): ABUS 2221 or ABUS 222. Course Attributes: Effective Communication Non-Writing, Requires Instructor Approval, Scientific and Quantitative Literacy.

ABUS 4901 - Special Topics in Business*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

Subject - Accounting (ACCT)**ACCT 1901 - Special Topics in Accounting***1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

ACCT 2201 - Accounting Foundations 2*3 Credits*

Enhanced coverage of generally accepted accounting principles (GAAP), financial transaction processing, and financial statement reporting and analysis for accounting majors. Training and certification in SAP Business One Accounting or other accounting software. Prerequisite(s): BIZ 2101.

ACCT 2901 - Special Topics in Accounting*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

ACCT 3011 - Intermediate Financial Accounting 1*3 Credits*

Financial accounting functions and basic theory. Preparation of financial statements. Prerequisite(s): BIZ 2201 or BIZ 2121.

ACCT 3021 - Intermediate Financial Accounting 2*3 Credits*

Preparation of financial statements, working capital, operational assets, long-term liabilities, leases and owners equity. Offered spring semester. Prerequisite(s): ACCT 3011 or ACCT 301.

ACCT 3031 - Auditing 1*3 Credits*

Auditor's professional ethics and legal liability. Business processes and internal control structure, including current AIS topics. Auditing procedures and practices relating to the independent verification of financial records, including assessment of the internal control system, audit evidence, issues of materiality and risk, and audit reports. Offered fall semester. Prerequisite(s): ACCT 2201 or BIZ 2121.

ACCT 3141 - Intermediate Managerial Accounting 1*3 Credits*

Emphasis on accounting information for decision making. Controls for material, labor and overhead cost. Cost-Volume-Profit analysis. Job order and process costing systems. Budgeting procedures. Standard costs and variance analysis. Variable costing and responsibility accounting for management reporting. Cost behavior pattern analysis. Decision models. Offered fall semester. Prerequisite(s): BIZ 2201 or BIZ 2121.

ACCT 3151 - Intermediate Managerial Accounting 2*3 Credits*

Cost allocation: service department cost and joint cost. Process costing in depth and accounting for defective units and scrap. Capital budgeting techniques. Responsibility accounting for management reporting. Offered spring semester. Prerequisite(s): ACCT 3141.

ACCT 3871 - Taxation 1*3 Credits*

Tax concepts in the taxation of individuals and entities. The role of taxation in business decisions, how to conduct basic tax research, tax planning, and professional standards and ethics. Interrelationships and differences between financial and tax accounting. Prerequisite(s): BIZ 2201 or BIZ 2121.

ACCT 3901 - Special Topics in Accounting*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Prerequisite(s): BIZ 2201. Unlimited repeats permitted.

ACCT 4021 - Current Topics in Accounting*3 Credits*

Accounting and reporting for not-for-profit organizations including state and local governments and colleges/universities (public and private). Emphasis given to Comprehensive Annual Financial Report (CAFR). In addition, other current topics in Accounting will be covered including International Financial Reporting Standards (IFRS), business combinations and consolidations, and others as deemed appropriate. Prerequisite(s): ACCT 3021.

ACCT 4041 - Auditing 2*3 Credits*

Continuation of ACCT 4031, including statistical sampling in auditing, computer technology in auditing, auditor's responsibility for detecting fraud, and current issues and problems in auditing. Offered spring semester. Prerequisite(s): ACCT 3031.

ACCT 4351 - International Financial Accounting*3 Credits*

Guiding principles behind international financial reporting standards (IFRS): commonalities, substantial divergences between US GAAP and IFRS. Financial Accounting from a multinational viewpoint involving foreign currency transactions and translation of financial statements denominated in a foreign currency. Also listed as IBEC 4351. Offered spring semester. Prerequisite(s): ACCT 3021.

ACCT 4871 - Taxation II*3 Credits*

An examination and application of U.S. Tax code as it relates to corporations and other forms of business ownership. Prerequisite(s): BIZ 2201 or BIZ 2121.

ACCT 4901 - Special Topics in Accounting*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

ACCT 4991 - Independent Study in Accounting*1 to 3 Credits*

An in-depth exploration of a subject of special interest. Can be repeated as topic varies. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Core (BIZ)**BIZ 0001 - Biz Lab 1***1 Credit Grading mode is S/U*

Activities include integration and college required program assessment. Offered as necessary. Corequisite(s): BIZ 1001. Must be enrolled in one of the following Colleges: Business Administration.

BIZ 1001 - Free Enterprise and Business Planning*3 Credits*

Integrative business survey course designed to introduce students to the free enterprise system via a business planning model. An overview of the key functions of business including accounting, finance, management, marketing, operations and human resources and career opportunities pertaining to each. Business majors only. Offered fall semester. Corequisite(s):. Must be enrolled in one of the following Colleges: Business Administration. Course Attributes: Critical and Creative Thinking, Effective Communication Writing, Integration Across Disciplines.

BIZ 1201 - Ethics for Business Planning

3 Credits

Systematic examination of alternative ethical decision making approaches necessary to business planning. Provides a critical thinking framework for analysis and discussion of alternative ethical decision making approaches. Case analysis provides experience in the implementation of the ethical decision making framework. Offered spring semester. Must be enrolled in one of the following Colleges: Business Administration. Course Attributes: Informed Ethical Responses.

BIZ 2021 - Microeconomic Foundations for Business Planning

3 Credits

Economics of the individual firm in the free market economy; competitive and monopolistic markets with a business planning focus. How prices ration goods and services to users, and the principles on which the total product is divided among the owners of the factors of production. Course Attributes: Social Science, Integration Across Disciplines.

BIZ 2031 - Macroeconomic Foundations for Business Planning

3 Credits

Forces that determine the behavior of national income and output, unemployment, and the price level with a business planning focus. Rudiments of money and banking, monetary and fiscal policy, growth and development. The dynamics between macroeconomy and business. Course Attributes: Social Science, Effective Communication Non-Writing, Scientific and Quantitative Literacy.

BIZ 2101 - Accounting Foundations for Business Planning

3 Credits

Introduction to accounting as an information system that serves internal and external stakeholders. Planning and evaluating activities related to the management cycle from a financial (external reporting) perspective and a managerial (internal reporting) perspective. Balanced scorecard analysis of business decisions through the lens of the four major business processes-organizations and strategy, operations, capital resources, and performance measurement and management.

BIZ 2131 - Legal Environment for Business Planning

3 Credits

Legal environment concepts and contract, agency, employment, business organization, property, and consumer law applied to business planning. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

BIZ 2331 - Behavioral Management for Business Planning

3 Credits

Modern management concepts with emphasis on the human factors involved in a successful business plan. Historical foundations, individual, group, and organizational process including current management issues. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

BIZ 2401 - Information Systems for Business Planning

3 Credits

The development, design and implementation of information systems for business planning. Terminology, concepts, and trends in computer hardware and software. Offered fall and spring semesters.

BIZ 2511 - Marketing for Business Planning

3 Credits

Principles of marketing strategy in the business planning process. Product design and planning, promotional activities, pricing strategy, aspects of physical distribution, retailing, market research, buyer behavior, ethics and global marketing. Offered fall and spring semesters. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

BIZ 2801 - Career Planning and Preparedness

3 Credits

Career development from résumé writing to negotiating job offers. Development of written, electronic, and oral communication skills in employment search. Critiques of résumés, cover letters, and interview styles. Career and industry exercises. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Business Administration. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

BIZ 3001 - Global Environment for Business Planning

3 Credits

Functional and environmental features of global business in the business planning process. Analysis of economic, cultural, legal and political forces affecting global business operations. Examination of organizational responses to the challenges of global business organizations. Formerly IBEC 300. Offered fall and spring semesters. Prerequisite(s): BIZ 2031. Course Attributes: Diversity-Human Interaction, Effective Communication Writing, Informed Ethical Responses.

BIZ 3621 - Financial Analysis for Business Planning

3 Credits

The role of financial analysis within the business planning process. Time value of money and risk/return concepts serve as the foundation for valuing (analyzing) the firm's sources of capital (debt and equity) and effectively allocating these funds through the capital budgeting process. Offered fall and spring semesters. Prerequisite(s): (STAT 2561 or STAT 1761) and (BIZ 2101 or BIZ 2111).

BIZ 3641 - Quantitative Management for Business Planning

3 Credits

Major issues and analytical problem solving techniques in the field of operations management that are used to successfully control the transformation of resources into products and services as established in a business plan. Offered fall and spring semesters. Prerequisite(s): BIZ 2331 and STAT 2561. Must be enrolled in one of the following Classifications: Junior, Senior.

BIZ 3991 - Biz Lab 2

1 Credit Grading mode is S/U

Preparation for senior capstone. Activities cultivate synthesis of BIZ core curriculum courses, initial selection of senior capstone project, and college required program assessment activities. Must be enrolled in one of the following Colleges: Business Administration. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Critical and Creative Thinking.

BIZ 4851 - Integrated Business Planning 1

2 Credits

Capstone course integrates tools and concepts from Business core courses. Develops strategic thinking and analysis for business planning. Case study is emphasized. Taken concurrently with BIZ 4852. Offered fall semester. Prerequisite(s): (BIZ 2121 or ACCT 2101) and BIZ 2511 and BIZ 2801 and BIZ 3001 and BIZ 3621 and BIZ 3641. Corequisite(s): BIZ 4852. Must be enrolled in one of the following Fields of Study: Accounting, Finance, International Business & Economics, Management, Marketing, Pharmaceutical Business, Risk Management and Insurance. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

BIZ 4852 - Business Planning Lab

1 Credit

Lab for BIZ 4851. Taken concurrently with BIZ 4851. Corequisite(s): BIZ 4851. Course Attributes: Integration Across Disciplines.

BIZ 4861 - Integrated Business Planning 2

1 Credit

Continuation of BIZ 4851. Completion of a strategic business plan for an applied business case. Offered spring semester. Prerequisite(s): BIZ 4851. Must be enrolled in one of the following Fields of Study: Accounting, Finance, International Business & Economics, Management, Marketing, Pharmaceutical Business, Risk Management and Insurance. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Effective Communication Non-Writing.

BIZ 4911 - Internship in Accounting

1 to 15 Credits Grading mode is S/U

Field experience in accounting. Can be repeated for a maximum of 16 credit hours. Up to 3 hours can be used to satisfy the accounting major requirement. Additional hours can be used as general elective hours and cannot be used to satisfy either accounting or business elective requirements. Consult advisor. Formerly ACCT 427. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Accounting. This course is repeatable for a total of 15 hours. Course Attributes: Requires Instructor Approval.

BIZ 4921 - Internship in Finance

1 to 15 Credits Grading mode is S/U

Field experience in Finance. Can be repeated for a maximum of 16 credit hours. Up to 3 hours can be used to satisfy the finance major requirement. Additional hours can be used as general elective hours and cannot be used to satisfy either finance or business elective requirements. Consult advisor. Formerly FINC 421. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Finance. This course is repeatable for a total of 15 hours. Course Attributes: Requires Instructor Approval.

BIZ 4931 - Internship in International Business and Economics

1 to 15 Credits Grading mode is S/U

Field experience in international business and economics. Can be repeated for a maximum of 16 credit hours. Up to 3 hours can be used to satisfy the international business and economics major requirement. Additional hours can be used as general elective hours and cannot be used to satisfy either international business and economics or business elective requirements. Open only to international business and economics majors. Consult advisor. Formerly IBEC 426. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: International Business & Economics. This course is repeatable for a total of 15 hours. Course Attributes: Requires Instructor Approval.

BIZ 4941 - Internship in Management

1 to 15 Credits Grading mode is S/U

Field experience in Management. Can be repeated for a maximum of 16 credit hours. Up to 3 hours can be used to satisfy the management major requirement. Additional hours can be used as general elective hours and cannot be used to satisfy either management or business elective requirements. Consult advisor. Formerly MGMT 425. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Management. This course is repeatable for a total of 15 hours. Course Attributes: Requires Instructor Approval.

BIZ 4951 - Internship in Marketing

1 to 15 Credits Grading mode is S/U

Field experience in marketing. Can be repeated for a maximum of 16 credit hours. Up to 3 hours can be used to satisfy the marketing major requirement. Additional hours can be used as general elective hours and cannot be used to satisfy either marketing or business elective requirements. Consult advisor. Formerly MRKT 420. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Marketing. This course is repeatable for a total of 15 hours. Course Attributes: Requires Instructor Approval.

BIZ 4961 - Internship in Pharmaceutical Business

1 to 15 Credits Grading mode is S/U

Field experience in pharmaceutical business. Can be repeated for a maximum of 16 credit hours. Up to 4 hours can be used to satisfy the pharmaceutical business major requirement. Additional hours can be used as general elective hours and cannot be used to satisfy either pharmaceutical business or business elective requirements. Consult advisor. Formerly PHBU 495. Offered fall and spring semesters. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business. This course is repeatable for a total of 15 hours. Course Attributes: Requires Instructor Approval.

BIZ 4971 - Internship in Risk Management

1 to 15 Credits Grading mode is S/U

Field experience in risk management. Can be repeated for a maximum of 16 credit hours. Up to 3 hours can be used to satisfy the risk management major requirement. Additional hours can be used as general education elective hours and cannot be used to satisfy either risk management or business elective requirements. Consult advisor. Offered fall and spring semesters. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance. This course is repeatable for a total of 16 hours. Course Attributes: Requires Instructor Approval.

Subject - Finance (FINC)**FINC 1101 - Personal Finance**

3 Credits

Personal and family financial planning with an emphasis on financial recordkeeping, budgeting, tax planning, consumer credit, housing, insurance, investments and retirement and estate planning. Offered fall and spring semesters.

FINC 1901 - Special Topics in Finance

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

FINC 2901 - Special Topics in Finance

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

FINC 3681 - Working Capital Management

3 Credits

Planning for and management of short term funds within the firm. Topics include cash management, short term investments, receivables management, and short term borrowings. Globalization of financial services delivery, and international cash management and foreign exchange risk emphasized. Techniques used to manage short term surplus funds and hedge for short term foreign exchange risk exposures discussed. Offered spring semester. Prerequisite(s): BIZ 3621 Minimum Grade of C.

FINC 3691 - Intermediate Financial Management

3 Credits

Advanced concepts and methods employed in financial management. Topics include financial analysis and planning, working capital management, risk analysis and valuation of long-term investments, and capital structure analysis. Offered fall semester. Prerequisite(s): BIZ 3621 Minimum Grade of C.

FINC 3901 - Special Topics in Finance

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

FINC 4601 - Financial Markets and Institutions

3 Credits

Policies and decisions regarding asset, liability, and capital management of a variety of financial institutions such as banks, insurance companies, pension funds, mutual funds and others within the legal, competitive and economic environment. Offered spring semester. Prerequisite(s): BIZ 2031 and BIZ 3621 Minimum Grade of C.

FINC 4611 - Investments & Wealth Management

3 Credits

The risk-return trade off and distinctive characteristics of different vehicles of financial investment including equities; debt and derivatives; portfolio management; the functioning and regulation of securities markets; the operation of mutual funds and other investment companies. The Efficient Markets Hypothesis receives special attention. Foundations for corporate as well as personal investment decisions. Offered fall and spring semesters. Prerequisite(s): BIZ 3621 Minimum Grade of C.

FINC 4671 - International Finance

3 Credits

The unique financial challenges and opportunities faced by a multinational enterprise. Hedging as a pivotal tool of exchange rate risk management; the long-term and short-term financing opportunities available to a multinational enterprise; international cash management; and multinational capital budgeting. Also listed as IBEC 4671. Offered spring semester. Prerequisite(s): BIZ 3001 and BIZ 3621 Minimum Grade of C.

FINC 4901 - Special Topics in Finance

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

FINC 5001 - Independent Study in Finance

1 to 3 Credits

An in-depth exploration of a subject of special interest. Can be repeated as topic varies. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - International Business and Economics (IBEC)**IBEC 1901 - Special Topics in International Business and Economics**

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

IBEC 2901 - Special Topics in International Business and Economics

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

IBEC 3521 - Money and Banking

3 Credits

Theories of money and credit; commercial banking practices; reserve banking; monetary and banking laws; money market; money and credit in the world economy. (Discipline: Economics.) Offered fall semester. Prerequisite(s): (BIZ 2031 or BIZ 203 or IBEC 203) and (BIZ 2021 or BIZ 202 or IBEC 202).

IBEC 3831 - Managerial Economics

3 Credits

Application of economic principles to managerial concerns. Use of interdisciplinary quantitative methods such as optimization analysis, game theory, statistics, and forecasting to solve business problems and predict managerial responses to changes in the business environment. Also listed as PHBU 3831. Prerequisite(s): BIZ 2021. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

IBEC 3861 - Development Economics

3 Credits

Special problems faced by less developed countries and the economic mechanisms that effect living standards. Topics include population growth, the demographic transition, savings and capital accumulation, education and human capital, health and human capital, institutions and the development process, the role of history and multiple equilibria, the role of expectations and multiple equilibria, and economic integration. Prerequisite(s): BIZ 2021 or BIZ 2031. Course Attributes: Critical and Creative Thinking, Integration Across Disciplines.

IBEC 3871 - Exporting

3 Credits

Tools, mechanics, opportunities, key success factors, unique challenges of exporting successfully: global market, industry and product assessment, export controls, export intermediaries and distribution, export pricing and terms of sale including INCO terms, documentation requirements, shipping terminology, export financing and credit, risk sharing, modes of entry, government export support programs. Regional and specific industry emphases. Presented in applied fashion using industry level export documentation/planning software, field trip, speakers, and an experiential project. Offered spring semester. Prerequisite(s): BIZ 3001 or BIZ 300 or IBEC 300.

IBEC 3901 - Special Topics in International Business and Economics

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

IBEC 4301 - Applied Econometrics

3 Credits

Introductory econometrics. Application of statistical methods to economic, business and social science topics. (Discipline: Economics.) Also listed as PHBU 4301. Offered spring semester. Prerequisite(s): BIZ 2021 and BIZ 2031 and STAT 2561. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

IBEC 4351 - International Financial Accounting

3 Credits

Guiding principles behind international financial reporting standards (IFRS): commonalities, substantial divergences between US GAAP and IFRS. Financial Accounting from a multinational viewpoint involving foreign currency transactions and translation of financial statements denominated in a foreign currency. Also listed as ACCT 4351. Offered spring semester. Prerequisite(s): ACCT 3021. May not be enrolled in one of the following Fields of Study: Accounting.

IBEC 4531 - International Marketing

3 Credits

World markets, their respective consumers and environments, and the marketing management required to meet the demand of world markets in a dynamic and everchanging setting. Contrasting marketing in the United States with marketing in foreign countries. Case studies illustrate marketing problems faced by international marketers. (Also listed as MRKT 4351.) Offered fall semester. Prerequisite(s): BIZ 2511 and BIZ 3001. May not be enrolled in one of the following Fields of Study: Marketing.

IBEC 4671 - International Finance

3 Credits

The unique financial challenges and opportunities faced by a multinational enterprise. Hedging as a pivotal tool of exchange rate risk management; the long-term and short-term financing opportunities available to a multinational enterprise; international cash management; and multinational capital budgeting. Also listed as FINC 4671. Offered spring semester. Prerequisite(s): BIZ 3001 and BIZ 3621 Minimum Grade of C. May not be enrolled in one of the following Fields of Study: Finance.

IBEC 4861 - International Management

3 Credits

The application of management concepts and techniques in a multinational environment. The meaning of culture as it applies to international management. Issues in international human resource management. A focus on relevant business simulations and cases. Also listed as MGMT 4861. Offered spring semester. Prerequisite(s): BIZ 2331. May not be enrolled in one of the following Fields of Study: Management.

IBEC 4901 - Special Topics in International Business and Economics

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

IBEC 4971 - Independent Study in International Business and Economics

1 to 3 Credits

An in-depth exploration of a subject of special interest. Can be repeated as topic varies. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Management (MGMT)**MGMT 1901 - Special Topics in Management**

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

MGMT 2901 - Special Topics in Management

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

MGMT 3251 - Employment Law

3 Credits

The legal relationship between employers and employees. Topics include the basic laws regulating labor relations, employment discrimination, workers' compensation and disability payments, occupational safety and health, employment, and unemployment compensation, termination of employment, and retirement. Prerequisite(s): BIZ 2131.

MGMT 3341 - Cases and Exercises in Organizational Behavior

3 Credits

Experiential and case-based approach to managing organizational behavior. Prerequisite(s): BIZ 2331 or BIZ 233 or MGMT 333.

MGMT 3631 - Human Resource Management*3 Credits*

Analysis of the role of human resources in contemporary organizations. Functions performed by the human resource practitioner in the areas of recruitment, training and development, compensation, employee relations, health and safety, and employee separation. The impact of government regulations. Offered fall and spring semesters. Prerequisite(s): BIZ 2331.

MGMT 3751 - Management Decision Making*3 Credits*

Qualitative and quantitative management tools and techniques used in problem solving and decision making. Qualitative tools include brainstorming, cause and effect diagrams, the nominal group technique, the Delphi technique, focus groups, force field analysis, competitive analysis, and value chain analysis. Quantitative methods concentrate on linear programming and forecasting. Also listed as PHBU 3751. Offered fall semester. Prerequisite(s): STAT 2561. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MGMT 3901 - Special Topics in Management*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

MGMT 4001 - Current Labor Relations*3 Credits*

Managerial and organizational aspects arising out of employer/union relations. The evolution of labor relations, current labor law, negotiation and administration of labor agreements, and labor relations in the public sector as well as in foreign countries. Prerequisite(s): MGMT 3631.

MGMT 4101 - Business and Society*3 Credits*

The complex and dynamic interrelationships between business and society: the social, cultural, legal, ethical, economic and technological issues, philosophies and points of view which influence business. Issues of corporate responsibility, individual rights and multi-national business. Offered spring semester. Prerequisite(s): BIZ 2331.

MGMT 4121 - Health Care Management*3 Credits*

Special management issues in the health sector: governance, human resources, financial statements and resource seeking, and performance assessments. Also listed as PHBU 4121. Offered spring semester. Prerequisite(s): BIZ 2331. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MGMT 4151 - Compensation Management*3 Credits*

Compensation and benefits fundamentals, strategies, practices, and current issues, including wage level determinants, job requirements, wage and salary structures, incentive systems, methods of job evaluation and wage payments, fringe benefits. Also listed as PHBU 4151. Offered spring semester. Prerequisite(s): MGMT 3631. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MGMT 4571 - Project Management*3 Credits*

Managerial planning and control. Tools and techniques involved in managing projects. Exercises in decision making and critical thinking. Also listed as PHBU 4571. Offered spring semester. Prerequisite(s): BIZ 2331. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MGMT 4741 - Small Business Management*3 Credits*

The importance of small business, its current status, problems encountered and requirements for successful operations. Emphasis on problem solving techniques for small business. Prerequisite(s): BIZ 1001 or ABUS 2221.

MGMT 4771 - Nonprofit Management*3 Credits*

Special management issues in the nonprofit sector: governance, human resources, financial statements and resource seeking, performance assessment, and current issues of concern to nonprofit managers. Offered fall semester. Prerequisite(s): BIZ 2331.

MGMT 4775 - Executive Classroom: Leadership Realities*3 Credits*

Develop leadership skills for students who will work in interdisciplinary teams shortly after graduation. Must be enrolled in one of the following Colleges: Business Administration. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Requires Instructor Approval.

MGMT 4861 - International Management*3 Credits*

The application of management concepts and techniques in a multinational environment. The meaning of culture as it applies to international management. Issues in international human resource management. A focus on relevant business simulations and cases. Offered spring semester. Prerequisite(s): BIZ 2331. May not be enrolled in one of the following Fields of Study: International Business & Economics.

MGMT 4901 - Special Topics in Management*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

MGMT 4981 - Independent Study in Management*1 to 3 Credits Grading mode is S/U*

An in-depth exploration of a subject of special interest. Can be repeated as topic varies. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

Subject - Marketing (MRKT)**MRKT 1901 - Special Topics in Marketing***1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

MRKT 2901 - Special Topics in Marketing*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

MRKT 3341 - Marketing Research*3 Credits*

Research design, data collection methods, sampling techniques, tabulation, analysis and presentation of information concerning problems in marketing. Provides a working knowledge of the concepts and methods of marketing research. Also listed as PHBU 3341. Prerequisite(s): BIZ 2511 and (STAT 1561 or STAT 1761 or STAT 2561). May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MRKT 3521 - Consumer Behavior*3 Credits*

Determinants of behavior which influence the purchase of goods and services. Consumer characteristics, situation analysis and product attributes are key topics covered in this area of behavior. Sociological, cultural, psychological, economic and communication theories used to create unique marketing mixes for specialized target markets. Also listed as PHBU 3521. Prerequisite(s): BIZ 2511. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MRKT 3541 - GIS for Marketing*3 Credits*

Geographies of markets, analysis of the location of markets, spatial and temporal trends, mapping markets, and GIS. Also listed as GGMK 3541. Course Attributes: Scientific and Quantitative Literacy.

MRKT 3631 - Product Development*3 Credits*

Issues in the development and marketing of new products and services. Also listed as PHBU 3631. Prerequisite(s): BIZ 2511. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MRKT 3901 - Special Topics in Marketing*1 to 3 Credits*

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

MRKT 4531 - International Marketing

3 Credits

World markets, their respective consumers and environments, and the marketing management required to meet the demand of world markets in a dynamic and everchanging setting. Contrasting marketing in the United States with marketing in foreign countries. Case studies illustrate marketing problems faced by international marketers. Also listed as IBEC 4531. Prerequisite(s): BIZ 2511 and BIZ 3001. May not be enrolled in one of the following Fields of Study: International Business & Economics.

MRKT 4601 - Integrated Marketing Communication

3 Credits

Management of the promotion mix and how its elements can be integrated to solve marketing communication problems. Specific topics include: advertising, personal selling, sales promotion, direct marketing, internet marketing and public relations. Prerequisite(s): BIZ 2511.

MRKT 4701 - Retailing

3 Credits

Retail store formats, trading area analysis, store location and design, inventory evaluation and management, pricing strategies, sales promotion, merchandise planning, procurement and selling functions. Offered fall semester. Prerequisite(s): BIZ 2511.

MRKT 4711 - Sales and Customer Relationship Management

3 Credits

Aspects of the behavioral approach to selling in the context of the marketing concept. Selling techniques which build long term customer relationships. Prospecting, ethics, qualifying, presenting, product demonstrations, handling objections, closing and follow up techniques, and international selling. Also listed as PHBU 4711. Prerequisite(s): BIZ 2511. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MRKT 4731 - Supply Chain Management

3 Credits

Move-storage activities that are necessary to deliver products to the right place, at the desired time, in the appropriate condition and at the lowest cost. Warehousing, transportation, order processing, inventory and material handling are key topics. Emphasis is given to the development of decision skills which will provide the best minimum total cost service to the customer. Also listed as PHBU 4731. Offered spring semester. Prerequisite(s): BIZ 2331 and BIZ 2511. May not be enrolled in one of the following Fields of Study: Pharmaceutical Business.

MRKT 4761 - Business to Business Marketing

3 Credits

Basic business marketing systems as distinguished from consumer marketing. Characteristics of manufacturer's goods, channels of distribution, pricing, vendor and value analysis, commercial buying, advertising, and meeting product specifications. Prerequisite(s): BIZ 2511.

MRKT 4901 - Special Topics in Marketing

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

MRKT 4961 - Independent Study in Marketing

1 to 3 Credits

An in-depth exploration of a subject of special interest. Can be repeated as topic varies. Offered fall and spring semesters. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

MRKT 4991 - Advanced Marketing

3 Credits

Integrative course in marketing which brings together all of the functional areas of marketing and requires development of marketing strategies and their application to problem situations. A group case approach is used. Must be enrolled in one of the following Fields of Study: Marketing, PHBU - Marketing Concentration. Must be enrolled in one of the following Classifications: Senior.

Subject - Pharmaceutical Business (PHBU)**PHBU 1001 - Introduction to the Health Care System 1**

1 Credit

An introduction to the primary aspects of the health care system. Major topics covered include hospitals and health systems, physicians and clinical services, health insurance, pharmaceuticals, and medical devices. Primary focus is on the US health care system. This course will include an experiential component. Must be enrolled in one of the following Major fields of study: Pharmaceutical Business.

PHBU 1901 - Special Topics in Pharmaceutical Business

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

PHBU 2001 - Introduction to the Health Care System 2

1 Credit

An introduction to the supporting aspects of the health care systems. Major topics covered include nursing homes, home health care, mental health services, the health care supply chain, the health care labor force, and health information technology. This course will include an experiential component. Prerequisite(s): PHBU 1001. Must be enrolled in one of the following Major fields of study: Pharmaceutical Business. Must be enrolled in one of the following Classifications: Sophomore.

PHBU 2901 - Special Topics in Pharmaceutical Business

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

PHBU 3051 - Introduction to Health Sciences for Business Professionals

3 Credits

Basic and pharmaceutical sciences including medical terminology, pharmacology, toxicology, medicinal chemistry, pharmacokinetics and pharmaceuticals. The role of pharmaceutical sciences in the health care system. Offered spring semester. Prerequisite(s): BIOL 1101 and BIOL 2311 and CHEM 1201. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 3341 - Marketing Research

3 Credits

Research design, data collection methods, sampling techniques, tabulation, analysis and presentation of information concerning problems in marketing. Provides a working knowledge of the concepts and methods of marketing research. Also listed as MRKT 3341. Prerequisite(s): BIZ 2511 and (STAT 1561 or STAT 1761 or STAT 2561). Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 3521 - Consumer Behavior

3 Credits

Determinants of behavior which influence the purchase of goods and services. Consumer characteristics, situation analysis and product attributes are key topics covered in this area of behavior. Sociological, cultural, psychological, economic and communication theories used to create unique marketing mixes for specialized target markets. Also listed as MRKT 3521. Prerequisite(s): BIZ 2511. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 3631 - Product Development

3 Credits

Issues in the development and marketing of new products and services. Also listed as MRKT 3631. Prerequisite(s): BIZ 2511. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 3751 - Management Decision Making

3 Credits

Qualitative and quantitative management tools and techniques used in problem solving and decision making. Qualitative tools include brainstorming, cause and effect diagrams, the nominal group technique, the Delphi technique, focus groups, force field analysis, competitive analysis, and value chain analysis. Quantitative methods concentrate on linear programming and forecasting. Also listed as MGMT 3751. Offered fall semester. Prerequisite(s): STAT 2561. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 3831 - Business Analytics

3 Credits

Application of economic principles to managerial concerns. Use of interdisciplinary quantitative methods such as optimization analysis, game theory, statistics, and forecasting to solve business problems and predict managerial responses to changes in the business environment. Also listed as IBEC 3831. Prerequisite(s): BIZ 2021. Must be enrolled in one of the following Fields of Study: Marketing, Pharmaceutical Business.

PHBU 3901 - Special Topics in Pharmaceutical Business

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

PHBU 3961 - Independent Study in PHBU

1 to 3 Credits

An in-depth exploration of a subject of special interest. Can be repeated as topic varies. Course Attributes: Requires Department Approval.

PHBU 4011 - Health Care Economics, Finance, and Regulation 1

3 Credits

An introduction to the role of markets and governments to allocate and finance health care. Major topics addressed include health insurance (private and public), the structure and function of health systems, regulation in the pharmaceutical and medical device industries, and health outcomes. Must be enrolled in one of the following Major fields of study: Pharmaceutical Business. Must be enrolled in one of the following Classifications: Senior.

PHBU 4021 - Health Care Economics, Finance, and Regulation 2

3 Credits

The roles of markets, legislation, and the courts in shaping the health care system. Emphasis on the impact of significant legislative through history and the policy process as it relates to the health care system. Additional professional and ethical issues are highlighted. Prerequisite(s): PHBU 4011. Must be enrolled in one of the following Major fields of study: Pharmaceutical Business. Must be enrolled in one of the following Classifications: Senior.

PHBU 4121 - Health Care Management

3 Credits

Special management issues in the health sector: governance, human resources, financial statements and resource seeking, and performance assessments. Also listed as MGMT 4121. Offered spring semester. Prerequisite(s): BIZ 2331. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 4151 - Compensation Management

3 Credits

Compensation and benefits fundamentals, strategies, practices, and current issues, including wage level determinants, job requirements, wage and salary structures, incentive systems, methods of job evaluation and wage payments, fringe benefits. Also listed as MGMT 4151. Offered spring semester. Prerequisite(s): MGMT 3631. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 4301 - Advanced Business Analytics

3 Credits

Introductory econometrics. Application of statistical methods to economic, business and social science topics. Also listed as IBEC 4301. Offered spring semester. Prerequisite(s): BIZ 2021 and BIZ 2031 and STAT 2561 and PHBU 3831. Must be enrolled in one of the following Fields of Study: Marketing, Pharmaceutical Business.

PHBU 4571 - Project Management

3 Credits

Managerial planning and control. Tools and techniques involved in managing projects. Exercises in decision making and critical thinking. Also listed as MGMT 4571. Offered spring semester. Prerequisite(s): BIZ 2331. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 4711 - Sales and Customer Relationship Management

3 Credits

Aspects of the behavioral approach to selling in the context of the marketing concept. Selling techniques which build long term customer relationships. Prospecting, ethics, qualifying, presenting, product demonstrations, handling objections, closing and follow up techniques, and international selling. Also listed as MRKT 4711. Prerequisite(s): BIZ 2511. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 4731 - Supply Chain Management

3 Credits

Move-storage activities that are necessary to deliver products to the right place, at the desired time, in the appropriate condition and at the lowest cost. Warehousing, transportation, order processing, inventory and material handling are key topics. Emphasis is given to the development of decision skills which will provide the best minimum total cost service to the customer. Also listed as MRKT 4731. Offered spring semester. Prerequisite(s): BIZ 2331 and BIZ 2511. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business.

PHBU 4901 - Special Topics in Pharmaceutical Business

1 to 3 Credits

Can be repeated as the topic varies. Offered fall and spring semesters. Unlimited repeats permitted.

PHBU 4961 - Independent Study in PHBU

1 to 3 Credits

An in-depth exploration of a subject of special interest. Can be repeated as topic varies. Course Attributes: Requires Department Approval.

PHBU 4991 - Advanced Marketing

3 Credits

Integrative course in marketing which brings together all of the functional areas of marketing and requires development of marketing strategies and their application to problem situations in the health care context. A group case approach is used. Must be enrolled in one of the following Fields of Study: PHBU - Marketing Concentration. Must be enrolled in one of the following Classifications: Senior.

Subject - Risk Management Insurance (RMI)**RMI 2621 - Risk Management and Insurance**

3 Credits

Principles of personal risk management and insurance. Topics include property and liability insurance, life and health insurance, employee benefits, and social security. Discussion of the functional and financial aspects of insurers. Offered spring semesters. Prerequisite(s): STAT 2561 Minimum Grade of C.

RMI 3211 - Life and Health Insurance Fundamentals

3 Credits

A study of the financial implications of death, disability and retirement, as well as the corresponding forms of individual life insurance, health insurance and annuities. Elementary life and health insurance programming, taxation, legal aspects, business uses of individual life and health insurance, regulation, and insurer operations and functions are covered. Prerequisite(s): RMI 2621 Minimum Grade of C.

RMI 3241 - Property and Liability Insurance Fundamentals

3 Credits

A study of the property-liability insurance industry, including the economic and financial issues inherent in property-liability contracting. Specific topics include automobile insurance costs and prices, tort reform effects on insurance markets, economics of distribution systems, corporate governance and organizational form, financial pricing models, solvency measurement, solvency regulation and market discipline, reinsurance and catastrophic risk, underwriting and risk selection, rate making techniques, and underwriting cycles. Prerequisite(s): RMI 2621 Minimum Grade of C.

RMI 3631 - Human Resource Management

3 Credits

Analysis of the role of human resources in contemporary organizations. Functions performed by the human resource practitioner in the areas of recruitment, training, and development, compensation, employee relations, health and safety, and employee separation. The impact of government regulations. Prerequisite(s): BIZ 2331 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance.

RMI 3691 - Intermediate Financial Management

3 Credits

Advanced concepts and methods employed in financial management. Topics include financial analysis and planning, working capital management, risk analysis and valuation of long-term investments, and capital structure analysis. Prerequisite(s): BIZ 3621 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance.

RMI 3751 - Management Decision Making

3 Credits

Qualitative and quantitative management tools and techniques used in problem solving and decision making. Qualitative tools include brainstorming, cause and effect diagrams, the nominal group technique, the Delphi technique, focus groups, force field analysis, competitive analysis, and value chain analysis. Quantitative methods concentrate on linear programming and forecasting. Prerequisite(s): BIZ 3641 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance.

RMI 3831 - Business Analytics

3 Credits

Application of economic principles to managerial concerns. Use of interdisciplinary quantitative methods such as optimization analysis, game theory, statistics, and forecasting to solve business problems and predict managerial responses to changes in the business environment. Prerequisite(s): BIZ 2021 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance.

RMI 4151 - Compensation Management

3 Credits

Compensation and benefits fundamentals, strategies, practices, and current issues, including wage level determinants, job requirements, wage and salary structures, incentive systems, methods of job evaluation and wage payments, fringe benefits. Prerequisite(s): RMI 3631 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance.

RMI 4301 - Advanced Business Analytics

3 Credits

Introductory econometrics. Application of statistical methods to economic, business and social science topics. Prerequisite(s): BIZ 2021 Minimum Grade of C and BIZ 2031 Minimum Grade of C and STAT 2561 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance.

RMI 4611 - Investments and Wealth Management

3 Credits

The risk-return trade off and distinctive characteristics of different vehicles of financial investment including equities; debt and derivatives; portfolio management; the functioning and regulation of securities markets; the operation of mutual funds and other investment companies. The efficient Markets Hypothesis receives special attention. Foundations for corporate as well as personal investment decisions. Prerequisite(s): BIZ 3621 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance.

RMI 4711 - Sales and Customer Relationship Management

3 Credits

Aspects of the behavioral approach to selling in the context of the marketing concept. Selling techniques which build long term customer relationships. Prospecting, ethics, qualifying, presenting, product demonstrations, handling objections, closing and follow up techniques, and international selling. Prerequisite(s): BIZ 2511 Minimum Grade of C. Must be enrolled in one of the following Major fields of study: Risk Management and Insurance.

MASTER OF PROFESSIONAL PRACTICE IN ACCOUNTING (MPPA) PROGRAM

Graduate Faculty: Professor M. Govekar, Woods; Associate Professors Christopher, Morgan.

Admission Standards

Admissions criteria for entry into the MPPA program include the following:

- General Minimum Application and Admissions Requirements
 - Earned Bachelor's degree in Accounting or other Bachelor's degree with coursework including Financial and Managerial Accounting Principles, Intermediate Accounting I & II, Auditing, and U.S. Federal Taxation
 - GMAT not required for applicants with overall undergraduate GPA of 3.25 or higher
 - Applicants with overall undergraduate GPA less than 3.25 must report a GMAT score of 500 or higher (Applicants with overall undergraduate GPA less than 3.0 must be approved by MPPA Program Committee)
 - TOEFL score, if applicable, of 600 for paper-based, 250 for computer-based, or 100 for Internet-based
 - Completion of online application form, including all requested documentation and references, and payment of application fee
- ONU Senior Accounting Majors
 - GMAT not required for students with overall undergraduate GPA of 3.25 or higher
 - GMAT with minimum score of 500 required for students with an undergraduate GPA of less than 3.25
 - Applicants with overall undergraduate GPA less than 3.0 must be approved by MPPA Program Committee
 - Completion of online application need not include transcripts of college work
 - Undergraduate graduation application must be submitted to the Dicke College Deans Office.
- ONU Law Students
 - Undergraduate accounting degree or equivalent coursework (listed above) with 3.0 or greater GPA (see General Requirements above)
 - GMAT not required as LSAT score enabling entry into College of Law viewed as equivalent to minimum GMAT score
 - Completion of online MPPA application form. Documentation and references not required as the DCBA will use admissions materials generated in the College of Law admissions process

Any applicant not meeting the minimum requirements will be referred to the MPPA Program Committee for their review and decision.

Master of Professional Practice in Accounting Degree Requirements

The Master of Professional Practice in Accounting (MPPA) degree is a 30 semester hour graduate degree program. Students pursuing the MPPA degree select one of two program concentrations: a forensic accounting and audit services track ("FAAS-Track") or a Tax Track ("TaxTrack"). The "FAAS Track" provides a blended on-line curriculum focused on facets of forensic accounting and internal/external auditing. The "TaxTrack" program, taught in conjunction with the ONU Pettit College of Law, provides students with the opportunity to focus their study on areas such as tax compliance, tax planning, tax research and tax litigation. Interested students are advised to contact their advisor or the Dean of the college for additional program information. The required internship (150 contact hours minimum) may be completed during the academic year or over the summer. Degree requirements can be completed in one calendar year if the program is pursued full time.

Tuition Rate

In 2015-16, the Master of Professional Practice in Accounting (MPPA) full-time tuition rate is \$14,120 per semester; part-time students will be charged \$1025 per credit hour. Students enrolled in the College of Law and in the MPPA program will be charged at the current College of Law tuition rate.

MPPA Core Courses

MPPA 5101	Professional Ethics and Sarbanes Oxley Compliance	3 hrs.
MPPA 5201	Corporate Governance and Risk Management	3 hrs.
MPPA 5801	Internship in Accounting	3 hrs.
MPPA 5741	The Accounting Professional	3 hrs.
	Required FAASTrack or TaxTrack Courses (6 courses)	18 hrs.
TOTAL		30 hrs.

FAASTrack (Forensic Accounting and Auditing Services) Course Requirements

The FAASTrack requires the MPPA core courses listed above plus the six courses (18 credit hours) listed below. All FAASTrack courses are delivered in either a blended or full online eight week format.

FAAS 5701	Basics of Expert Testimony	3 hrs.
FAAS 5341	Fraud Examination	3 hrs.
FAAS 5421	Internal Auditing	3 hrs.
FAAS 5601	Business Valuation	3 hrs.
FAAS 5841	Data Analytics	3 hrs.
FAAS 5881	Advanced Topics in Auditing	3 hrs.

TaxTrack Course Requirements

TaxTrack courses are delivered either by Dicke College graduate faculty or faculty of the Petit College of Law in a semester format campus-based or in an eight week blended format (designated by *). The TaxTrack requires the MPPA core courses listed above, plus two required courses (6 ch):

TAX 5331	Federal Income Tax	3 hrs.
TAX 5831	Taxation of Corporations	3 hrs.
TAX 5411	Taxation of Partnerships and Partners	3 hrs.

Either
TAX 5371 Research Methods (MPPA TaxTrack students) 3 hrs.
OR Elective from below (JD/MPPA TaxTrack students)

Plus a total of 6 credit hours (9 hours for JD/MPPA students) of elective courses which must include:

TAX 5601	Business Valuation	3 hrs.
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The balance of the TaxTrack electives may be selected from the following:

TAX 5431	Taxation of Estates, Gifts, and Trusts	3 hrs.
TAX 5451	Non-Profit Organizations	3 hrs.
TAX 5871	Business Planning	3 hrs.
TAX 5891	Estates, Wills & Trusts	3 hrs.
TAX 5931	International Taxation	3 hrs.

General Regulations of the MPPA Program

1. All students are expected to participate in college program assessment activities.
2. Each student enrolled in the College of Business Administration MPPA Program is expected to make consistent progress toward completion of the degree requirements of his/her program(s).
3. Students are required to maintain a minimum cumulative GPA of 3.0. A minimum GPA of 3.0 is required for graduation from the program.
4. The grade of "C" is the minimum passing grade for graduate credit; however, no more than 6 credit hours of "C" grades may be applied toward the degree. A grade of "D" received in a graduate-level course may not be applied toward a graduate degree. Students earning a grade of "F" in any course will be referred to the MPPA Program Committee for possible academic suspension.
5. MPPA students must satisfactorily complete 30 semester hours of required course work for the specific concentration for graduation.
6. Credit hours earned in repeated courses may be counted only once in the total hours required for graduation.
7. A student not enrolled for one academic year (except on approved academic leave) must meet graduation requirements in the catalog effective for the academic year during which the student reentered.
8. All course requirements must be completed within three years of enrollment.

Academic Standing

A student who earns a grade of C or below in two graduate courses or whose GPA falls below 3.0 will be placed on academic probation. A student who earns a grade of C in three courses or a grade of D or F in any course will be reviewed by graduate faculty and may be placed on academic suspension from the program. Graduate students must earn a grade of C or higher in all courses and maintain a minimum GPA of 3.0 to avoid suspension from the program.

Graduate students will be evaluated each 8-week term by the MPPA Program Committee. This evaluation shall take into account the standards listed above. On the basis of this evaluation, and after review by the MPPA Program Committee, the student may be:

- Recommended for continuation in the graduate program,
- Placed on probationary status, or
- Suspended from the Program and the Graduate School.

Academic Probation

Probations and suspensions can be appealed by petition, according to the procedures laid out below.

Students admitted in regular status will automatically be placed in probationary status after completion of any 8-week term during which their cumulative graduate grade point average drops below a 3.0 or they receive the second grade of C or below. Students will continue in probationary status until the end of the subsequent 8-week term. At the end of that period, the following actions may be taken:

- Student remains in probationary status
- Student is suspended if their cumulative grade point average remains below 3.0, or
- Student's probationary status is removed if their cumulative grade point average is 3.0 or higher.

A probationary letter is issued to the student indicating the conditions that must be met and outlining an appropriate time frame in which to regain good academic standing in the graduate program. The outcome that will result if the conditions are not met also be included in the probationary letter. Probationary letters will be made in writing by the director of the MPPA program at the end of the term during which the student earned the second grade of "C", earned a grade below "C", or cumulative GPA dropped below 3.0, and will indicate the terms of the probation and its removal. After the specified time frame outlined in the probation letter, the student must be sent a letter removing the probationary status, a dismissal letter, or a second probationary letter with a new set of conditions for regaining good academic standing.

Graduate students not meeting the written terms of their academic probation may be academically suspended from the program by the director of the program. Such suspensions shall be done in a timely fashion but no later than three weeks after the completion of the term.

Repeating a Course

Students are permitted to repeat for credit a graduate course in which they earned a grade of C or lower. This option is contingent on approval by the graduate program director and then approval by the MPPA Program Committee. MPPA students are allowed to repeat at most two courses in the degree program. A course may be repeated only once. However, because tuition scholarships are merit-based, a tuition scholarship award does not cover repeated courses. When a course is repeated, the original course and grade remain on the transcript; however, the last grade and units earned replace the original and are the only ones used in computing the overall grade point average. Students who have been dropped from the degree program may not use the course repeat process to gain readmission into the degree program.

Reinstatement

A graduate student who has been officially suspended and who seeks reinstatement shall submit a formal request for reinstatement, along with a supporting statement of explanation, to the Dean of the Dicke College of Business Administration within 15 days of notification of suspension.

Transfer Credit for Graduate Program

1. A maximum of six credits of high-quality graduate work done at an AACSB accredited institution may be applied toward the requirements for the graduate degree. However, credits earned to complete a previous master's degree may not be applied to a second master's degree.
2. Approval to apply any transferred credits toward a degree program is considered on a case-by-case basis and must be granted by the Program Director and the MPPA Program Committee.
3. Transfer credits must meet the following criteria:
 - Must have been earned at an AACSB accredited institution;
 - Must be of "A" or "B" grade value (pass-fail grades are not transferable);
 - Must appear on an official graduate transcript;
 - Must be earned within the three years prior to the date of registration.
4. If transferring credits from a university/college that is on quarter hours, quarter hours must be converted to semester hours. In order to convert quarter hours credit to equivalent semester hours credit, multiply the number of quarter hours by two-thirds.

Leave of Absence

A leave of absence for a period of time no longer than one calendar year may be granted because of medical necessity, full-time employment, receipt of an external award, or other acceptable reasons. The student should submit a request for a leave of absence to the Graduate Program Director. A student is eligible to request a leave of absence only after having completed at least one semester in the program. Time limitations which pertain to the various degrees and the completion of courses on which a grade of I (incomplete) was earned are not waived.

Subject - Forensic Accounting and Auditing (FAAS)

FAAS 5341 - Fraud Examination

3 Credits

Survey of the types of occupational fraud with the goal of understanding how and why people commit fraud, how fraudulent conduct might be deterred, and how allegations of fraud should be investigated and resolved. Also listed as ACCT 3071. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

FAAS 5421 - Internal Auditing

3 Credits

The course will cover internal audit from a broad perspective that includes information technology, business processes, and accounting systems. Topics include internal auditing standards, risk assessment, governance, ethics, audit techniques, and emerging issues. The course covers the design of business processes and the implementation of key control concepts and will use a case study approach that addresses tactical, strategic, systems, and operational areas. Improvement in effectiveness and efficiency will be covered in the areas of operations, finance and technology. This course's content follows the recommended curriculum of the Institute of Internal Auditors' Internal Auditing Educational Partnership program. Topics included in the class will assist students in preparing to take the Certified Internal Auditor examination. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

FAAS 5601 - Business Valuation

3 Credits

Assessment of organizational health and value via business strategy, accounting, financial, and prospective analysis. Calculation of values using the income and market approaches. Selection of appropriate standard of value. Financial statement adjustments and calculation of premiums, discounts, and capitalization rates. Use of research and database resources. The curriculum of this course follows recommendations set forth by the National Association of Certified Valuation Analysts. Students passing the final examination in this course will earn 16 credit hours toward the training requirement necessary to sit for the NACVAs Accredited Valuation Analyst (AVA) certification examination. Ohio Northern University is an educational partner with the NACVA. Also listed as TAX 5601. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

FAAS 5701 - Basics of Expert Testimony

3 Credits

Legal aspects of the forensic engagement, including rules of evidence and procedure. Also listed as TAX 5701. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

FAAS 5841 - Data Analytics

3 Credits

This course covers the skills needed to use technology to conduct audits and fraud investigations. Students will learn to use tools such as data mining, public records databases, fraud-related software packages, auditing software packages, case management tools, presentation and reporting tools, data analysis programs, statistical analysis software, and spreadsheet programs. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

FAAS 5881 - Advanced Topics in Auditing

3 Credits

This is a seminar course which covers current issues in auditing. Content varies each year. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

Subject - Master of Professional Practice in Accounting (MPPA)

MPPA 5101 - Professional Ethics and Sarbanes Oxley Compliance *3 Credits*

Ethical reasoning, integrity, objectivity, independence and other core values as defined by the American Institute of Certified Public Accountants are discussed. A discussion of the provisions of the Sarbanes-Oxley Act provides the students with an appreciation of the legal constraints that result from lapses in ethical reasoning, integrity and objectivity in the accounting profession. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

MPPA 5201 - Corporate Governance and Risk Management

3 Credits

The course provides a study of the structured system of policies and processes established and maintained by the board of directors to oversee an organization's strategic activities, assessment and management of risk, accountability and openness in conducting its activities for the long term. Focus on boards of trustees; committees; rights, relationship with shareholders; policies and procedures related to accounting, auditing, executive compensation and financial reporting; and identification of risk and strategies to manage risk. Previously listed as FAAS 5201 and TAX 5201. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

MPPA 5741 - The Accounting Professional

3 Credits

This course provides an overview of the professional responsibilities and ethical concerns of accounting professionals, including business etiquette, conduct and interpersonal communication. The course will review the structure of the profession, certifications, issues of ethics and responsibility, the legal environment, and the future of the profession. Students will explore how to utilize accounting and related journals and databases to conduct research about the profession. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

MPPA 5801 - Internship in Accounting

1-3 Credits Grading mode is S/U

Internship in accounting. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting. This course is repeatable for a total of 3 hours.

Subject - Taxation (TAX)

TAX 5331 - Federal Income Tax

3 Credits

The fundamentals of federal income taxation, emphasizing its application to individuals. Gross income (inclusions and exclusions); adjusted gross income; deductions; taxable income; taxable credits; identification of the taxpayer; general tax accounting principles; and basic federal tax procedure. The application of the income tax law to business and investment property, including capital gains and losses, depreciation, and recapture. A consideration of the non-recognition and deferral of income, and other factors affecting the computation of tax liability. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5371 - Research Methods

3 Credits

Legal research methods with a focus on tax law, including distinctions between primary and secondary sources and location of materials in electronic and printed form. Methodology to determine, research, resolve and communicate tax law issues. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5411 - Taxation of Partnerships and Partners

3 Credits

Taxation of partnerships and partners. The federal tax law applying to the relationship between the partnership and its partners. The formation, operation, and liquidation of partnerships, as well as the sale of a partnership, interest, and the retirement of a partner. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5431 - Taxation of Estates, Gifts, and Trusts*3 Credits*

The operation and use of federal tax provisions applicable to inter vivos and testamentary dispositions of property with particular emphasis upon matters of federal estate and gift taxation. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5451 - Non-Profit Organizations*3 Credits*

The rules affecting charitable organizations, including tax-exempt income, unrelated business income, lobbying and political activities, and the deduction of contributions. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5601 - Business Valuation*3 Credits*

Assessment of organizational health and value via business strategy, accounting, financial, and prospective analysis. Calculation of values using the income and market approaches. Selection of appropriate standard of value. Financial statement adjustments and calculation of premiums, discounts, and capitalization rates. Use of research and database resources. The curriculum of this course follows recommendations set forth by the National Association of Certified Valuation Analysts. Students passing the final examination in this course will earn 16 credit hours toward the training requirement necessary to sit for the NACVAs Accredited Valuation Analyst (AVA) certification examination. Ohio Northern University is an educational partner with the NACVA. Also listed as FAAS 5601. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5701 - Basics of Expert Testimony*3 Credits*

Legal aspects of the forensic engagement, including rules of evidence and procedure. Also listed as FAAS 5701. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5831 - Taxation of Corporations*3 Credits*

Federal income taxation of corporate activities, with emphasis on consequences to individual shareholders. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5871 - Business Planning*3 Credits*

State substantive law and securities and tax law in planning the formation and change of business entities. Proposing solutions to the problems presented by the business client, the preparation of better explaining proposals to the client, and drafting documents that will carry out the proposed plan. Problems involving both incorporated and unincorporated business entities. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5891 - Estates, Wills & Trusts*3 Credits*

The law of intestate and testate succession; formal requirements of wills, testamentary capacity, undue influence, fraud and mistake, holographic and nuncupative wills integration and incorporation by reference; revocation, republication, revival and amendment. The nature, creation, and elements of a trust; rights, liabilities and duties of settlor, trustee and beneficiary; creditors rights against trust property; modification and termination of a trust, charitable trusts; resulting and constructive trusts, and general fiduciary responsibilities and administrative problems. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.

TAX 5931 - International Taxation*3 Credits*

Basic survey of international taxation law, including source of income and expense allocation rules, international tax credits, transfer pricing, antiferral rules, withholding taxes, income tax treaties, tax incentives, and expatriate issues. Must be enrolled in one of the following Programs: Master of Professional Practice in Accounting.



THE THOMAS JEFFERSON SMULL COLLEGE OF
Engineering

THE THOMAS JEFFERSON SMULL COLLEGE OF

Engineering

Eric T. Baumgartner, *Dean*

Accreditation and Association

Bachelor degree programs in civil, computer, electrical and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET and the computer science program is accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>. The College is a member of the American Society for Engineering Education and the Association for Computing Machinery and is recognized by the Ohio Board of Registration for Professional Engineers and Surveyors.

History and Tradition

In 1871 the first catalog of the University included a course in surveying. A department of Civil Engineering was organized in 1880 with its first graduate in 1882 followed by Electrical Engineering in 1898, and Mechanical Engineering in 1904. The Electrical and Computer Engineering department was formed in 1998 and in 2001 the department of Electrical & Computer Engineering and Computer Science was established. Over 6,200 engineers have graduated from the Thomas Jefferson Smull College of Engineering. All programs continue to meet the highest standards of engineering excellence.

The following faculty chairs have been established to enhance the educational tradition of the college.

Herbert F. Alter Chair of Engineering Science established in 1983 by Mrs. Alter in memory of her late husband, class of 1911 in mechanical engineering. The 2014-15 recipient of the chair is Dr. Heath LeBlanc, assistant professor electrical and computer engineering.

Engineering Alumni Chair established in 1983 by donations from engineering alumni and friends in celebration of the college's centennial year. The 2014-2015 recipient of the chair is Dr. Bryan Boulanger, associate professor of civil engineering.

Leroy H. Lytle Distinguished Chair of Mechanical Engineering established in 1983 from the estate of Leroy H. Lytle, 1923 graduate of ONU. The 2014-15 recipient of the chair is Dr. David Sawyers, associate professor of mechanical engineering.

Departments

There are three departments in the College of Engineering: civil engineering, electrical & computer engineering and computer science, and mechanical engineering.

Mission Statement

The mission of the College of Engineering of Ohio Northern University is to engage students through personal relationships and high impact educational experiences to maximize their success.

Core Values

The College of Engineering values personal relationships, engagement, opportunity and the development and success of individuals.

Admission Standards

Early application is advisable. Students interested in engineering or computer science are encouraged to obtain advice on programs of study from the dean of the college and to request appropriate information and application materials from the Office of Admissions, Ohio Northern University, Ada, OH 45810.

In addition to the general requirements for admission to the University stated in this catalog, it is highly recommended that high school graduates have 16 acceptable units of work. For engineering students, ten of these units are as follows: 4 units in English; 4 units in mathematics; and 2 units in science (1 unit in physics and preferably 1 unit in chemistry). For computer science students, fourteen of these units are as follows: 4 units in English; 4 units in mathematics; 6 units (in any combination) in history, social studies, languages or natural sciences. Acceptable scores on the American College Test or the College Entrance Examination Board Test are expected of all candidates.

Prospective students who do not meet the minimum requirement for admission to the college as freshmen may be admitted as General Science majors, and subsequently be admitted to the College of Engineering as sophomores providing they maintain a GPA of at least 2.00 during their freshman year.

Transfer students from other accredited universities or colleges may be admitted with advanced standing if they have an honorable dismissal and are eligible to return to the universities or colleges they previously attended. Transfer students who conceal their previous college attendance will have their admission to the college revoked. The college will accept transfer credits earned with a grade of C or better (C- is not acceptable). Transfer credit for engineering courses will normally only be accepted from an ABET accredited program. A maximum of 96 hours of transfer work will be accepted.

Degree Requirements

Bachelor of Science degree in civil, computer, electrical or mechanical engineering

General Education Requirements

College faculty and staff are dedicated to educating the whole person and not simply producing technically competent graduates. Therefore our goal is to graduate engineers and computer scientists who conform to the general education learning objectives of the university that have been previously stated in the catalog.

All students are required to complete a general education requirement. The requirement includes specific courses and electives in the Humanities and Social Sciences: Writing Seminar, Extra-disciplinary Seminar, Professional Ethics, Business Elective (Microeconomics, Macroeconomics or Principles of Entrepreneurship), and General Education Electives (4).

Each student should consider carefully the selection of electives for the general education requirements. While the student is given choices in this selection it is mandatory that these choices be discussed with, and approved by, the academic advisor.

Because the general education available change from year to year, they are not listed in this catalog.

An approved Honors Seminar may fulfill a requirement listed above. For specific information, see the office of the dean.

Bachelor of Science in Civil Engineering Curriculum

Freshman Year

Calculus 1 and 2 (MATH 1631, 1641)	8 hours
Chemistry 1 and Lab (CHEM 1501 and 1551)	4 hours
Physics 1 and Lab (PHYS 2311, 2341)	4 hours
Writing Seminar (ENGL 1221)	3 hours
Engineering Orientation (ENGR 1001)	0 hours
Introduction to Engineering 1, 2 (ENGR 1041, 1051)	6 hours
General Education Electives	6 hours
TOTAL	31 hours

Sophomore Year

Calculus 3 (MATH 2631)	4 hours
Differential Equations (MATH 2651)	4 hours
Physics 2 (PHYS 2321)	3 hours
Science Elective	4 hours
Statics (ENGR 2131)	3 hours
Strength of Materials (ENGR 2231)	3 hours
Surveying (CE 2031)	3 hours
Engineering Science Elective 1	3 hours
Extra-disciplinary Seminar	3 hours
General Education Elective	3 hours
TOTAL	33 hours

Junior Year

Structural Analysis (CE 3411)	4 hours
Transportation Engineering 1 (CE 3511)	3 hours
Engineering Fluid Mechanics (CE 3611)	3 hours
Reinforced Concrete Design (CE 3431)	4 hours
Transportation Engineering 2 (CE 3531)	3 hours
Water Resources Engineering (CE 3631)	3 hours
Environmental Engineering and Science (CE 3231)	3 hours
Statistics for Scientists and Engineers (STAT 2501)	3 hours
Engineering Science Elective 2	3 hours
Business Elective	3 hours
TOTAL	32 hours

Senior Year

Civil Engineering Seminar (CE 4101)	1 hour
Project Management (CE 4141)	3 hours
Structural Steel Design (CE 4441)	3 hours
Water and Wastewater Treatment (CE 4241)	4 hours
Geotechnical Principles (CE 4341)	3 hours
Geotechnical Design (CE 4351)	3 hours
Civil Engineering Design Project (CE 4151)	3 hours
Civil Engineering Electives	6 hours
Professional Ethics (PHIL 2401)	3 hours
General Education Elective	3 hours
TOTAL	32 hours

Bachelor of Science in Computer Engineering Curriculum**Freshman Year**

Calculus 1, 2 (MATH 1631, 1641)	8 hours
Physics 1 & Lab (PHYS 2311, 2341)	4 hours
Chemistry & Lab (CHEM 1501, 1551)	4 hours
Writing Seminar (ENGL 1221)	3 hours
Orientation (ENGR 1001)	0 hour
Introduction to Engineering 1, 2 (ENGR 1041, 1051)	6 hours
Programming 1, 2 (ECCS 1611, 1621)	8 hours
TOTAL	33 hours

Sophomore Year

Differential Equations (MATH 2651)	4 hours
Discrete Mathematics (MATH 3061)	3 hours
Physics 2 & Lab (PHYS 2321, 2351)	4 hours
General Education Electives	6 hours
Business Elective	3 hours
Electric Circuits (ECCS 2311)	4 hours
Data Structures & Algorithms 1 (ECCS 2671)	3 hours
Digital Logic (ECCS 2721)	3 hours
Signals and Systems (ECCS 2321)	3 hours
TOTAL	33 hours

Junior Year

Digital Signal Processing (ECCS 3311)	3 hours
Electronics (ECCS 3331)	4 hours
Microprocessors (ECCS 3351)	3 hours
Networks and Data Communication (ECCS 3631)	3 hours
Operating Systems (ECCS 3661)	3 hours
Computer Architecture (ECCS 3611)	4 hours
Embedded Systems (ECCS 3241)	3 hours
Statistics for Sci. & Engr. (STAT 2501)	3 hours
Professional Ethics (PHIL 2401)	3 hours
Extra-disciplinary Seminar	3 hours
TOTAL	32 hours

Senior Year

Senior Design 1, 2 (ECCS 4711, 4721)	5 hours
Engineering Economy (ECCS 4391)	1 hour
VLSI System Design (ECCS 4211)	3 hours
Computer Engineering Electives	9 hours
Engineering Elective	3 hours
Math/Science Elective	3 hours
General Education Electives	6 hours
TOTAL	30 hours

Bachelor of Science in Electrical Engineering Curriculum**Freshman Year**

Calculus 1, 2 (MATH 1631, 1641)	8 hours
Physics 1 & Lab (PHYS 2311, 2341)	4 hours
Chemistry & Lab (CHEM 1501, 1551)	4 hours
Writing Seminar (ENGL 1221)	3 hours
General Education Elective	3 hours
Orientation (ENGR 1001)	0 hour
Introduction to Engineering 1, 2 (ENGR 1041, 1051)	6 hours
Programming 1 (ECCS 1611)	4 hours
TOTAL	32 hours

Sophomore Year

Calculus 3 (MATH 2631)	4 hours
Differential Equations (MATH 2651)	4 hours
Discrete Mathematics (MATH 3061)	3 hours
Physics 2 & Lab (PHYS 2321, 2351)	4 hours
General Education Elective	3 hours
Engineering Elective	3 hours
Electric Circuits (ECCS 2311)	4 hours
Digital Logic (ECCS 2721)	3 hours
Signals and Systems (ECCS 2321)	3 hours
Professional Ethics (PHIL 2401)	3 hours
TOTAL	34 hours

Junior Year

Electromagnetics (ECCS 3111)	3 hours
Digital Signal Processing (ECCS 3311)	3 hours
Electronics (ECCS 3331)	4 hours
Energy Systems 1 (ECCS 3121)	4 hours
Control Systems (ECCS 3141)	4 hours
Communication Systems (ECCS 3191)	4 hours
Statistics for Sci. & Engr. (STAT 2501)	3 hours
Engineering Elective	3 hours
Extra-disciplinary Seminar	3 hours
TOTAL	31 hours

Senior Year

Senior Design 1, 2 (ECCS 4711, 4721)	5 hours
Engineering Economy (ECCS 4391)	1 hour
Microprocessors (ECCS 3351)	3 hours
Energy Systems 2 (ECCS 4111)	3 hours
System Design (ECCS 4191)	1 hour
EE Electives	9 hours
Business Elective	3 hours
General Education Electives	6 hours
TOTAL	31 hours

Bachelor of Science in Mechanical Engineering Curriculum**Freshman Year**

Calculus 1 and 2 (MATH 1631, 1641)	8 hours
Chemistry and Lab (CHEM 1501, 1551)	4 hours
Physics 1 and Lab (PHYS 2311, 2341)	4 hours
Writing Seminar (ENGL 1221)	3 hours
Orientation (ENGR 1001)	0 hours
Introduction to Engineering 1,2 (ENGR 1041, 1051)	6 hours
Engineering Material Science (ME 1411)	3 hours
General Education Elective	3 hours
Business Elective	3 hours
TOTAL	34 hours

Sophomore Year

Differential Equations (MATH 2631)	4 hours
Physics 2 (PHYS 2321)	3 hours
Statics (ENGR 2131)	3 hours
Dynamics (ENGR 2141)	3 hours
Strength of Materials (ENGR 2231)	3 hours
Electric Circuits (ECCS 2311)	4 hours
Computer Applications (ME 3511)	3 hours
Thermodynamics (ME 2311)	3 hours
Math/Science elective	3 hours
Extra-disciplinary Seminar	3 hours
TOTAL	32 hours

Junior Year

Mechanical Design I and II (ME 3111, 3121)	6 hours
Dynamic Systems I and II (ME 3211, 3221)	7 hours
Fluid Mechanics (ME 3311)	3 hours
Heat Transfer (ME 3321)	3 hours
Thermal Sciences Lab (ME 3331)	1 hour
Technical Elective	3 hours
Professional Ethics	3 hours
Statistics for Scientists and Engineers (STAT 2501)	3 hours
Experimental Methods (ME 3511)	2 hours
Manufacturing Laboratory (ME 3411)	1 hour
TOTAL	32 hours

Senior Year

Process of Design (ME 4011)	3 hours
Capstone I and II (ME 4111, 4121)	3 hours
Engineering Analysis (ME 4511)	3 hours
Technical Elective	3 hours
General Education Electives	9 hours
Mechanical Engineering Electives	6 hours
Science/Math Elective	3 hours
TOTAL	30 hours

Bachelor of Science - Engineering Education Curriculum

Starting in the Fall 2011, the College of Engineering established a new program leading to a Bachelor of Science degree with a major in Engineering Education. This degree will provide a graduate with a foundation in engineering, mathematics and education and meets the curriculum and experience requirements for the teacher licensure program in AYA Mathematics (7-12) based on the standards of the National Council of Teachers of Mathematics (NCTM). Graduates of the Engineering Education program are also required to conform to the general education learning objectives of the university that have been previously stated in the catalog.

Freshman Year

Engineering Orientation (ENGR 1001)	0 hours
Calculus 1 and 2 (MATH 1631, 1641)	8 hours
Physics 1 and Physics Laboratory 1 (PHYS 2311, 2341)	4 hours
Writing Seminar (ENGL 1221)	3 hours
Introduction to Engineering 1, 2 (ENGR 1041, 1051)	6 hours
Communication in the Classroom (CAMS 1311)	3 hours
Culture and Schooling (EDUC 1151) (20 hours field)	3 hours
Exceptional Learners (EDUC 2101) (20 hours field)	3 hours
TOTAL	30 hours

Sophomore Year

Calculus 3 (MATH 2631)	4 hours
Differential Equations (MATH 2651)	4 hours
Electric Circuits (ECCS 2311)	4 hours
Statics (ENGR 2131)	3 hours
Strength of Materials (ENGR 2231)	
or Engineering Material Science (ME 1411)	3 hours
Extra-disciplinary Seminar	3 hours
Dynamics (ENGR 2141)	3 hours
Foundations of Mathematics (MATH 2691)	3 hours
Development Across Lifespan (PSYC 2151)	3 hours
Technical Elective 1	3 hours
TOTAL	33 hours

Junior Year

Statistics for Scientists and Engineers (STAT 2501)	3 hours
Educ. Psychology & Instr. Practices (EDUC 4401) (20 hours field)	3 hours
Computer Applications (ME 2511)	3 hours
Curriculum and Assessment (EDUC 2681) (20 hours field)	3 hours
Engineering Education 1 (ENGR 3101)	4 hours
Foundations of Geometry (MATH 4211)	3 hours
Literacy Across Content Areas AYA/MA (EDUC 3451) (20 hours field)	3 hours
Technical Electives 2, 3 and 4	9 hours
TOTAL	31 hours

Senior Year

Senior Design 1 and 2 (ENGR 4201 and 4211)	6 hours
Engineering Education 2 (ENGR 4101)	4 hours
Abstract Algebra 1 (MATH 3411)	3 hours
Technical Elective 5	3 hours
Instruction Assessment Practicum (EDUC 3901)	1 hour
Integrated Mathematics Methods (EDUC 4541) (20 hours field)	3 hours
Leadership Seminar in Education (EDUC 4451)	2 hours
Student Teaching - Adolescent (EDUC 4721)	12 hours
TOTAL	34 hours

Bachelor of Science - Computer Science Curriculum

College faculty and staff are dedicated to educating the whole person and not simply producing technically competent graduates. Therefore our goal is to graduate computer scientists who conform to the general education learning objectives of the university that have been previously stated in the catalog.

All students are required to complete a general education requirement. A list of electives and approved science courses is available from the Electrical & Computer Engineering and Computer Science Department Office. An approved Honors Seminar may fulfill a general education requirement.

Freshman Year

Calculus 1, 2 (MATH 1631, 1641)	8 hours
Science Electives & Labs	8 hours
Writing Seminar (ENGL 1221)	3 hours
General Education Elective	3 hours
CS Orientation (ECCS 1101)	1 hour
Net-Centric Computing (ECCS 1421)	3 hours
Programming 1, 2 (ECCS 1611, 1621)	8 hours
TOTAL	34 hours

Sophomore Year

Discrete Mathematics (MATH 3061)	3 hours
Math Elective	3 hours
General Education Electives	6 hours
Business Elective	3 hours
Data Structures and Algorithms 1, 2 (ECCS 2671, 2681)	6 hours
Design Patterns (ECCS 2411)	3 hours
Programming Environments (ECCS 2431)	3 hours
Software Engineering (ECCS 2421)	3 hours
Digital Logic (ECCS 2721)	3 hours
TOTAL	33 hours

Junior Year

Theory of Computation (ECCS 3431)	3 hours
Computer Security and Ethics (ECCS 3411)	3 hours
User Interface Design (ECCS 3451)	3 hours
Operating Systems (ECCS 3661)	3 hours
Databases (ECCS 3481)	3 hours
Computer Architecture (ECCS 3611)	4 hours
Statistics for Sci. & Engr. (STAT 2501)	3 hours
Science Elective & Lab	4 hours
Math Elective	3 hours
Extra-disciplinary Seminar	3 hours
TOTAL	32 hours

Senior Year

CS Capstone 1, 2 (ECCS 4471, 4472)	5 hours
Programming Languages (ECCS 4411)	3 hours
Networks and Data Communication (ECCS 3631)	3 hours
CS Electives	6 hours
Ethics	3 hours
General Education Elective	3 hours
Free Electives	6 hours
TOTAL	29 hours

Requirements for the Computer Science Minor

The student must take Programming 1 (ECCS 1611), Programming 2 (ECCS 1621), Data Structures and Algorithms 1 (ECCS 2671) and three more computer science courses, one of which must be at least a junior level course.

Students who are interested in a computer science minor are advised to contact the Electrical & Computer Engineering and Computer Science department for more details.

Student Outcomes

By the time of graduation, students majoring in the college's engineering programs will have:

- an ability to apply knowledge of mathematics, science, and engineering
- an ability to design and conduct experiments, as well as to analyze and interpret data
- an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- an ability to function on multidisciplinary teams
- an ability to identify, formulate, and solve engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- a recognition of the need for, and an ability to engage in life-long learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

By the time of graduation, students majoring in the college's computer science program will have:

- an ability to apply knowledge of computing and mathematics appropriate to the discipline
- an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- an ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- an ability to function effectively on teams to accomplish a common goal
- an understanding of professional, ethical, legal, security and social issues and responsibilities
- an ability to communicate effectively with a range of audiences
- an ability to analyze the local and global impact of computing on individuals, organizations, and society
- a recognition of the need for and an ability to engage in continuing professional development
- an ability to use current techniques, skills, and tools necessary for computing practice
- an ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices
- an ability to apply design and development principles in the construction of software systems of varying complexity

Engineering Education

Program Educational Objectives

Graduates of the Engineering Education program will:

PEO 1: Demonstrate success in their chosen profession

PEO 2: Contribute to an expansion of knowledge of both engineering and education through professional development opportunities and community service

PEO 3: Develop and cultivate identities as "engineering educators" by functioning at the intersection of engineering and education

Concentrations

The College of Engineering offers an Advanced Energy concentration for students who are pursuing degrees in computer engineering, electrical engineering or mechanical engineering. The Advanced Energy concentration builds on a strong foundation in these programs coupled with cross-discipline courses that integrate concepts prevalent within the advanced energy industry.

The college also offers a Robotics concentration for students who are pursuing degrees in computer engineering, computer science, electrical

engineering or mechanical engineering. The concentration requires a course in robotics and allows students to choose from a variety of electives to complete the program.

Please contact the appropriate department office for the specific plan of study for each degree program.

Graduation Requirements

A student qualifies for graduation by meeting specific course requirements as listed in the catalog year by year for the specific program at specific levels and by earning a minimum number of academic hours as defined by their particular program. In addition, a student must attain at least a 2.00 cumulative grade point average in all courses and at least a 2.00 cumulative grade point average in all engineering and computer science courses.

All degree candidates are required to spend their senior year in academic residence.

At commencement engineering students receive the Bachelor of Science degree in either civil, computer, electrical, or mechanical engineering. Computer science and engineering education students receive the Bachelor of Science degree.

General Regulations

Each department in the college lists term by term the standard course load for a student. The normal maximum load is that which is listed by the department for that term at that level or 19 hours, whichever is larger. The dean, upon recommendation of the student's advisor, may permit a student to enroll for extra hours at an additional charge. See page 11 for overload charges beyond 19 credit hours. The normal requirement is a cumulative grade point average of at least 3.00. Except where noted, credit hours earned in repeated courses can be counted only one time among the total hours required for graduation.

S/U Grade Option

Students in the College of Engineering are not permitted to register for courses on an S/U (Satisfactory/Unsatisfactory) basis if the course is offered on a graded basis.

Classification of Students

For purposes of classification, the minimum requirements for sophomore standing are 30 semester credit hours of completed academic work; for junior standing, 60 semester credit hours; and for senior standing, 90 semester credit hours.

Academic Standing

A student is in good academic standing when the cumulative grade point average is equal to or greater than 2.00. When the cumulative grade point average falls below 2.00, a student is placed on probation. In addition, any student with a term grade point average of 1.00 or lower may be placed on probation or suspended. The status of probation may occur for two successive semesters if conditions and evidence indicate that the student is improving academically. Students on probation cannot participate in competitive activities of individuals, teams, or other groups officially designated as representing the University.

Any student on probation whose term grade point average for the following semester is below a 2.00 will have his/her record reviewed by the appropriate department chairman and may be recommended to the dean for academic actions which may include suspension or dismissal. Unless otherwise indicated, suspension is for a period of two regular academic semesters. Students who have been suspended may petition the academic dean for lifting of the suspension.

Registration as a Professional Engineer

Registration as a Professional Engineer by the state, necessary for professional practice, requires licensing examinations and four years of experience after completing the Bachelor of Science degree. ONU senior engineering students are strongly encouraged to take the Fundamentals of Engineering (FE) exam. Typically more than 90% of graduating seniors take the exam and more than 90% pass the exam. The dean provides full information to students in their senior year. Students may also write the Secretary of the State Board of Registration for Professional Engineers and Surveyors, 77 South High Street, Room 1698, Columbus, OH 43215-6108.

Engineering Graduates and Law School

Graduating seniors of the T.J. Smull College of Engineering interested in entering the Pettit College of Law at Ohio Northern should refer to the program description material on page 22 of this catalog.

Dual Degree Programs

Information concerning dual degree programs involving the College of Engineering appears on page 22 of this catalog. Students may receive further details from the academic dean.

Cooperative Education Program

The cooperative education program is designed to integrate classroom study with planned and supervised work experiences. Engineering and computer science co-op students normally are employed in semiprofessional capacities in research, development, manufacturing, and engineering departments of industrial companies, consulting firms, and in federal and state agencies. The employment sessions begin in the summer following the sophomore year and include a contracted three to five terms of co-op experience. This five-year program is optional and currently available for all students in the College of Engineering.

GENERAL ENGINEERING COURSES

Subject - Engineering (ENGR)

ENGR 1001 - Engineering Orientation

0 Credits Grading mode is S/U

Student introduction to the College of Engineering, introduction to the profession, and a forum for first-year advising. Offered fall semester. Must be enrolled in one of the following Colleges: Engineering.

ENGR 1041 - Introduction to Engineering 1

3 Credits

The engineering profession and application of the engineering design and analysis processes: problem solving with consideration of assumptions, criteria and constraints, generation of solutions through the application of standard engineering techniques; communication of results in standard formats. Engineering ethics. Offered fall semester. Must be enrolled in one of the following Colleges: Engineering. Course Attributes: Critical and Creative Thinking, Effective Communication Writing, Informed Ethical Responses.

ENGR 1051 - Introduction to Engineering 2

3 Credits

A team-based conceptual design project based on the engineering design method: preparation of proposal, analysis of design alternatives, constraints and criteria, testing and verification by prototyping, preparation and presentation of project report. Offered spring semester. Prerequisite(s): ENGR 1041. Must be enrolled in one of the following Colleges: Engineering. Course Attributes: Diversity-Human Interaction, Effective Communication Non-Writing, Integration Across Disciplines.

ENGR 1211 - Engineering in an International Context

3 Credits

The history of technology and the engineering profession, with emphasis on a location outside the United States. The course will include a faculty-led trip to a foreign destination in order to visit sites of historical and technological significance. Offered Spring semester. Course Attributes: Informed Responses-Aesthetics, Requires Instructor Approval.

ENGR 1221 - International Experience in Engineering

1 Credit Grading mode is S/U

A faculty-led trip to a foreign destination in order to visit sites of historical and technological significance. Offered Spring Semester. This course may be repeated 3 times. This course is repeatable for a total of 3 hours. Course Attributes: Requires Instructor Approval.

ENGR 1901 - Special Topics

1 to 3 Credits

Selected topics of current interest in general engineering. May be repeated as topic varies. Offered fall and spring semesters. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ENGR 1911 - Special Topics

1 to 3 Credits Grading mode is S/U

Topics in engineering. Enrollment is restricted to student with specific engineering experiences, such as attendees of programs such as Summer Honors Institute or Project Lead The Way. May be repeated as topics or experiences vary. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted.

ENGR 1951 - Independent Study

1 to 3 Credits

Individual study of topic of particular interest to the student and instructor in general engineering. Offered fall and spring semesters. Must be enrolled in one of the following Classifications: Freshman, Sophomore. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ENGR 2131 - Statics

3 Credits

Fundamental principles of statics with vector methods. Emphasis on free body diagrams and equations of equilibrium. Topics include resultants of force systems, centroids, centers of gravity, moments of inertia, equilibrium, shear and moment diagrams, loads, trusses, and internal forces. Offered fall and spring semesters. Prerequisite(s): MATH 1631 or (MATH 1621 and PHYS 2311).

ENGR 2141 - Dynamics

3 Credits

Fundamental principles of mechanics with vector methods as applied to dynamics. Topics include: kinematics, absolute and relative motion, force, mass and acceleration, work and energy, and impulse and momentum. Offered spring semester. Prerequisite(s): ENGR 2131 Minimum Grade of C and MATH 1641.

ENGR 2231 - Strength of Materials

3 Credits

Elastic analysis of deformable bodies using concepts of stress and strain. Topics include: members subjected to tension, compression, torsion, and flexure; development and application of Mohr's circle, determinate beam deflection, material properties, pressure vessels, and composite beams. Offered spring semester. Prerequisite(s): ENGR 2131.

ENGR 2501 - Introduction to Career Development

1 Credit Grading mode is S/U

An introduction to career development including an introduction to industry, the industrial work environment, resume writing, interviewing and job search techniques. Course is designed to prepare a sophomore engineering or computer science student for the industrial experience. Offered fall semester. Must be enrolled in one of the following Colleges: Engineering. May not be enrolled in one of the following Classifications: Freshman.

ENGR 2601 - EPICS

1 Credit

A service-learning design course in which teams of students work together on long-term projects that address the engineering and/or computing needs of a community partner. Must be enrolled in one of the following Colleges: Engineering. This course may be repeated 8 times. Course Attributes: Integration Across Disciplines.

ENGR 2611 - Explorations into Sustainability

3 Credits

This multi-disciplinary site visit based course focuses upon developing enhanced written and oral technical communication skills while familiarizing the students with engineering practice. The course's learning outcomes include improving communication, self-identification with professional practice, and enhancing knowledge of the interdisciplinary nature of sustainability in practice. Enrollment is open to all students.

ENGR 2901 - Special Topics

1 to 3 Credits

Selected topics of current interest in general engineering. May be repeated as topic varies. Offered fall and spring semesters. Must be enrolled in one of the following Departments: Engineering. May not be enrolled in one of the following Classifications: Freshman. Unlimited repeats permitted.

ENGR 2951 - Independent Study

1 to 3 Credits

Individual study of topic of particular interest to the student and instructor in general engineering. Offered fall and spring semesters. Must be enrolled in one of the following Classifications: Sophomore, Junior. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ENGR 3101 - Engineering Education 1

4 Credits

To include topics from history of engineering and math/science that apply to engineering, an overview of the mathematical foundation of engineering, graphing and the use of technology in a K-12 classroom. Admission to Teacher Education or permission of instructor required. Offered spring semester. Course Attributes: Effective Communication Non-Writing, Informed Responses-Aesthetics, Requires CTE admission, Scientific and Quantitative Literacy.

ENGR 3501 - Professional Practice

1 Credit Grading mode is S/U

Cooperative education (co-op) employment in a semi-professional capacity. Students work full-time (40 hours per week) in the research, development, manufacturing, or engineering department of an industrial company, consulting firm or governmental agency. A student report on the assignment and an employer's evaluation are required. CUM GPA of 2.5 minimum required. Offered fall, spring and summer semesters. Prerequisite(s): ENGR 2501 Minimum Grade of S. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Classifications: Junior, Senior. This course may be repeated 5 times.

ENGR 3611 - Interdisciplinary Design Experience

3 Credits

This interdisciplinary course is an immersive design experience aimed at improving student knowledge and application across engineering disciplines. The course focuses upon developing a growth mindset, improving communication skills, facilitating collaboration, and generating, evaluating, and selecting concepts from multiple design alternatives. The course's learning outcomes include: problem identification, problem decomposition, design progression and articulation, prototyping, and critical reflection. This hands-on course will guide students through a design-build-test-refine model of engineering design.

ENGR 4101 - Engineering Education 2

4 Credits

To include topics from history and pedagogy of engineering in a K-12 environment, use of pedagogical tools, curriculum development and current policy issues. Admission to Teacher Education or permission of instructor required. Offered fall semester. Prerequisite(s): ENGR 3101. Course Attributes: Requires CTE admission.

ENGR 4201 - Engineering Education Senior Design 1

3 Credits

Educational aspects within a team-based design project in area in or related to a specific discipline within engineering issues regarding effective teamwork. Utilization of project management standards. Establishment of project capabilities, requirements and constraints. Pedagogy and/or policy issues as applied to projects. Must be enrolled in one of the following Fields of Study: Engineering Education. Course Attributes: Critical and Creative Thinking, Effective Communication Writing, Integration Across Disciplines.

ENGR 4211 - Engineering Education Senior Design 2

3 Credits

Continuation of Engineering Education Senior Design 1. Demonstration of educational aspects of project capabilities. Acceptance testing. Project deliverables. Prerequisite(s): ENGR 4201. Course Attributes: Informed Responses-Aesthetics.

DEPARTMENT OF CIVIL ENGINEERING

Professors Smalley, Ward; **Associate Professors** Boulanger (*Chair*), Abdel-Mohti **Assistant Professors** France, Johnstone, Ye, and Zechman (*Assistant Dean, Academic and Student Affairs*).

Mission Statement

The mission of the civil engineering department is to provide an overall scholarly, collegial, and professional atmosphere of undergraduate education by which students are prepared for careers in civil engineering.

To implement the mission, the department will:

- Provide a program that prepares students for entry-level professional employment or advanced studies at the graduate level by offering a curriculum based on a strong background in the fundamentals of engineering, science, and mathematics structured for breadth of coverage of civil engineering principles.
- Provide for areas of concentration, minors, and an opportunity for work experience through a cooperative education program.
- Provide for a student body of appropriate quality and size that is active in the university community.
- Provide a faculty who excel in undergraduate scholarship and who are active in their profession.
- Provide state-of-the-practice physical facilities, including classrooms, laboratories, and support areas.
- Provide for institutional commitment for support in the areas of administration, financial resources, and institutional facilities.

Program Educational Objectives

We expect the alumni of our civil engineering program to attain;

1. Advancement to a professional position within civil engineering by virtue of their knowledge, skills, and attitude;
2. Recognition for solving engineering problems and developing design solutions that consider aesthetics, safety, and sustainability;
3. A reputation for conducting professional endeavors in a responsible and ethical manner; and
4. Professional development through a commitment to career-long learning.

Subject - Civil Engineering (CE)

CE 2031 - Surveying

3 Credits

Plane surveying; use of level, distance measurement devices, data collectors, and total stations; traversing, roadway applications, and topographic mapping, and introduction to coordinate geometry, GIS and GPS applications. Offered fall semester. Prerequisite(s): MATH 1611 or MATH 1631.

CE 3031 - Advanced Surveying

3 Credits

A second surveying course that expands on the basic surveying skills presented in CE 2031. Topics include: history of Ohio land surveys, Ohio surveying law, boundary surveying fundamentals, gathering of surveying field data, and preparation of preliminary engineering site drawings. Offered spring semester. Prerequisite(s): CE 2031.

CE 3131 - Numerical and Statistical Methods

3 Credits

Principles of numerical methods used in solving civil engineering problems. Topics include numerical solutions of single variable equations, systems of non-linear equations, integration and differentiation, differential and partial differential equations by finite differences, and statistical techniques. Offered spring semester. Prerequisite(s): MATH 2651.

CE 3231 - Environmental Engineering and Science

3 Credits

Sources and characteristics of pollutants, their effects on the environment, humans, and animals. Emphasis placed on interdisciplinary approach to reduce and treat wastes. Offered spring semester. Prerequisite(s): CHEM 1501.

CE 3251 - Environmental Systems Analysis*3 Credits*

Introduction to principles of environmental systems and sustainability. The course serves to connect students to the characteristics and functions of natural systems. The course has a focus on sustainability and challenges a student's approach to engineering design in order to improve the impacts of development on society. Prerequisite(s): CE 3231.

CE 3411 - Structural Analysis*4 Credits*

Analyses of determinate beams, trusses and frames and indeterminate beams and frames. Topics include deflections, displacements, principle of superposition, moving loads, influence lines, cables and arches, slope deflection method, and moment distribution method. Offered fall semester. Prerequisite(s): ENGR 2231.

CE 3431 - Reinforced Concrete Design*4 Credits*

Mechanics of structural concrete and method for design of reinforced concrete (RC) beams, columns, slabs, and footing. In addition, laboratory on concrete testing. Offered spring semester. Prerequisite(s): CE 3411.

CE 3511 - Transportation Engineering 1*3 Credits*

Introduction to components of transportation systems, traffic flow modeling, geometric design of highways, horizontal and vertical curves, highway capacity and level of service, traffic control devices, signalized intersection analysis and design. Offered fall semester. Prerequisite(s): CE 2031.

CE 3531 - Transportation Engineering 2*3 Credits*

Introduction to design of pavements for transportation facilities, components of transportation planning (4-step model), the use of MicroStation in roadway geometric design, data collection and analysis techniques in traffic engineering. Offered spring semester. Prerequisite(s): ENGR 2231 and CE 3511.

CE 3551 - Transportation Engineering 3*3 Credits*

Introduction to the applications of Geographic Information System (GIS) into traffic engineering, roadway safety design, and the use of GIS for traffic safety data analysis. Offered spring semester. Prerequisite(s): CE 3511.

CE 3611 - Engineering Fluid Mechanics*3 Credits*

Principles of the mechanics of fluids; engineering properties of fluids, fluid statics, fluid dynamics by continuity, momentum and energy principles; steady flow in pipes, to include series and parallel pipes and pipe networks. A water distribution term project is required. ENGR 2141 is strongly recommended before you take this course. Offered fall semester. Prerequisite(s): ENGR 2131.

CE 3631 - Water Resources Engineering*3 Credits*

Pump design, and water hammer; flow measurement and dimensional analysis and similitude. Estimates of population, water usage and wastewater generation; the hydrologic cycle, precipitation and stream flow data measurement and analysis; runoff prediction, hydrographs, flood routing, and open channel flow. A design term project is required. Offered spring semester. Prerequisite(s): CE 3611.

CE 3711 - Urban Planning*3 Credits*

Principles of city and regional planning; land-use, zoning, subdivision regulations, metropolitan problems and urban development. Topics will cover applications in the transportation planning and the environmental areas. Offered spring semester.

CE 3901 - Special Topics*1 to 3 Credits*

Selected topics of current interest in civil engineering. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

CE 3951 - Independent Study*1 to 3 Credits*

Independent study of a topic of particular interest to the student in civil engineering. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

CE 4101 - Civil Engineering Design Seminar*1 Credit*

Engineering design process; selection of senior design project; oral and written presentation of project proposal. Civil Engineering senior standing. Offered fall semester. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Civil Engineering. Must be enrolled in one of the following Classifications: Senior.

CE 4141 - Project Management*3 Credits*

Principles of organization, management, and control of civil engineering projects. Topics include present and emerging legal and technical issues, critical path methods, project estimating and engineering economics. Offered fall semester.

CE 4151 - Civil Engineering Design Project*3 Credits*

Capstone design project under the specific guidance of a civil engineering faculty member. Offered spring semester. Prerequisite(s): CE 4101. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Civil Engineering. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

CE 4241 - Water and Wastewater Engineering*4 Credits*

Physical, chemical, and biological processes in drinking water and wastewater treatment systems. Offered fall semester. Prerequisite(s): CE 3231 and CE 3631.

CE 4251 - Watershed Water Quality Analysis*3 Credits*

Integrated lecture and field laboratory course experience to delve more deeply into the mass balance and kinetic relationships in environmental processes presented in CE 3231 Environmental Engineering & Science. Students will participate in laboratory and field experiences to determine common environmental water quality parameters and their impacts on surface water quality. Report preparation included. Offered spring semester. Prerequisite(s): CE 3231.

CE 4341 - Geotechnical Principles*3 Credits*

Physical characteristics, index properties, classification, and compaction of soils. Principles of mechanics of soils, settlement, and consolidation. Offered fall semester. Prerequisite(s): ENGR 2231.

CE 4351 - Geotechnical Design*3 Credits*

Analysis and design of structural foundations, retaining structures, and slope stability. Offered spring semester. Prerequisite(s): CE 4341.

CE 4441 - Structural Steel Design*3 Credits*

Load and resistance factor design concept (LRFD), and design of tension and compression members, beam, columns, beam-column members, and simple connections. Instability of steel members. Offered fall semester. Prerequisite(s): CE 3411.

CE 4451 - Structural Design*3 Credits*

Design of structural projects. Offered spring semester. Prerequisite(s): CE 3431 and CE 4441.

CE 4661 - Advanced Open Channel Hydraulics and Ground Water*3 Credits*

Continuation of open channel flow analysis with sewer design and modeling water surface profiles. Groundwater topics of confined and unconfined aquifers, steady and unsteady groundwater hydraulics, aquifer pumping tests, and mathematical groundwater modeling. Offered spring semester. Prerequisite(s): CE 3631.

CE 4901 - Special Topics

1 to 3 Credits

Selected topics of current interest in civil engineering. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

CE 4951 - Independent Study

1 to 3 Credits

Independent study of a topic of particular interest to the student in civil engineering. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING AND COMPUTER SCIENCE

Professors Al-Olimat (*Chair*), Estell, Hurtig (*Associate Vice President for Academic Affairs*), Vemuru; **Associate Professors** Hassan, Retterer; **Assistant Professors** Alsbou, Coman, LeBlanc, Youssfi.

Mission and Purpose Statement

The mission of the electrical & computer engineering and computer science department is to develop graduates who are creative, productive, ethical, and contributing members of society.

It is the purpose of the department to provide:

- a professional and approachable faculty who are dedicated to mentoring students.
- accessible, hands-on, practical laboratory experiences using relevant equipment and disciplined practices.
- opportunities for students to develop and practice oral and written communications skills.
- a broad-based curriculum that stresses fundamentals and the development of a professional work ethic.
- an environment that will produce students who are creative problem solvers while considering ethical and societal implications.

COMPUTER SCIENCE

Program Educational Objectives

Graduates of the Computer Science program are expected to attain the following attributes:

- PEO 1: success in their chosen career.
PEO 2: engagement in continuing professional development.
PEO 3: effectiveness in communicating with those both inside and outside of computer science.
PEO 4: a predisposition toward practicing the professional, ethical and moral responsibilities of computer scientists.
PEO 5: readiness to accept challenging assignments and responsibilities.

COMPUTER ENGINEERING

Program Educational Objectives

Graduates of the Computer Engineering program are expected to attain the following attributes:

- PEO 1: success in their chosen career.
PEO 2: engagement in continuing professional development.
PEO 3: effectiveness in communicating with those both inside and outside of computer engineering.
PEO 4: a predisposition toward practicing the professional, ethical and moral responsibilities of computer engineers.
PEO 5: readiness to accept challenging assignments and responsibilities.

ELECTRICAL ENGINEERING

Program Educational Objectives

Graduates of the Electrical Engineering program are expected to attain the following attributes:

- PEO 1: success in their chosen career.
PEO 2: engagement in continuing professional development.
PEO 3: effectiveness in communicating with those both inside and outside of electrical engineering.
PEO 4: a predisposition toward practicing the professional, ethical and moral responsibilities of electrical engineers.
PEO 5: readiness to accept challenging assignments and responsibilities.

Subject - Electrical & Computer

Engineering and Computer Science (ECCS)

E ECCS 1101 - Computer Science Orientation

1 Credit

Introduction to the ECCS Department with primary emphasis on the Computer Science Program. Understanding of the curriculum and the role played by Computer Scientists in society. A discussion about how the general education learning outcomes may relate to the students' careers with a focus on critical and creative thinking. All requirements of the General Education Transitions Experience are met by this course. Offered fall semester. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Computer Science. Course Attributes: Critical and Creative Thinking.

ECCS 1421 - Net-Centric Computing

3 Credits

Software development tools and techniques appropriate for application development on the World Wide Web. HTTP, HTML, Cascading Style Sheets, client-side scripting, server-side scripting, server-side data storage and retrieval, relational databases. Offered spring semester. Must be enrolled in one of the following Classifications: Freshman, Sophomore, Junior, Senior.

ECCS 1611 - Programming 1

4 Credits

Use of a high-level programming language in a modern integrated development environment to produce small-scale programs that meet written specifications. Simple and aggregate data types. Input/output. Arithmetic and Boolean expressions. Fundamentals of sequence, selection, and iteration. Functions. Introduction to object-oriented programming. Recommended background: College Algebra (MATH 1251). Offered fall and spring semesters. Must be enrolled in one of the following Classifications: Freshman, Sophomore, Junior, Senior. Course Attributes: Critical and Creative Thinking, Scientific and Quantitative Literacy.

ECCS 1621 - Programming 2

4 Credits

Continuation of Programming 1. Focus on the object-oriented programming paradigm: classes, objects, methods, information hiding, inheritance, polymorphism. Software engineering: tools, design, testing, validation. Graphical user interfaces and their fundamental widgets. Event-driven programming. Offered spring semester. Prerequisite(s): ECCS 1611. Must be enrolled in one of the following Classifications: Freshman, Sophomore, Junior, Senior.

ECCS 2311 - Electric Circuits

4 Credits

DC and AC circuits. Basic laws, analysis techniques, and circuit theorems. Op amps, first-order circuits, sinusoids and phasors, ac power analysis, ideal transformers and three phase circuits. Computer simulation. Integrated laboratory experience. Offered fall semester. Prerequisite(s): MATH 1631 or MATH 1621. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

ECCS 2321 - Signals and Systems

3 Credits

Signal and system analysis in the time domain. Frequency domain analysis using Laplace transform, Fourier series, and Fourier transform. System modeling and analog filter design. Offered spring semester. Prerequisite(s): ECCS 2311 and MATH 2651. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

ECCS 2411 - Design Patterns

3 Credits

Named problems occurring in object-oriented design featuring the 23 fundamental Gang of Four design patterns, applications and use. Offered fall semester. Prerequisite(s): ECCS 1621. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

ECCS 2421 - Software Engineering

3 Credits

Requirements, design, implementation, testing, deployment, and maintenance of software systems, primarily directed to object oriented systems. Focus on Agile Software Development Principles and Practices. Offered spring semester. Prerequisite(s): MATH 3061 and ECCS 1621. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

ECCS 2431 - Programming Environments

3 Credits

Use of a software development environment to build a large project. Solutions incorporate third party library code, databases, networks and student generated libraries. Students work independently. Offered fall semester. Prerequisite(s): ECCS 1621. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

ECCS 2671 - Data Structures & Algorithms 1

3 Credits

Basics of algorithm analysis and creation. Standard sorting algorithms. Trade-offs of various algorithms. Classical data structures: arrays, heaps, queues, priority queues, hash tables, linked lists, binary trees. Offered fall semester. Prerequisite(s): ECCS 1621. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

ECCS 2681 - Data Structures & Algorithms 2

3 Credits

Continuation of Data Structures and Algorithms 1. Advanced techniques for algorithm analysis and creation. Greedy algorithms. Amortized analysis. Dynamic programming. Fibonacci heaps. Graph-based data structures and algorithms. Offered spring semester. Prerequisite(s): ECCS 2671. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior.

ECCS 2721 - Digital Logic

3 Credits

Analysis and design of combinational circuits. Analysis and design of sequential systems. Design using standard combinational and sequential modules. Application of VHDL and Xilinx software design tools. Verification of digital systems in FPGAs and ModelSim simulation. Offered spring semester. Prerequisite(s): MATH 3061. Must be enrolled in one of the following Classifications: Sophomore, Junior, Senior. Course Attributes: Critical and Creative Thinking, Scientific and Quantitative Literacy.

ECCS 2991 - Research Experience

1 to 3 Credits Grading mode is S/U

A planned learning experience involving participation in an approved research project. A paper and an oral presentation regarding the research experience are required. Course Attributes: Requires Department Approval, Requires Instructor Approval.

ECCS 3111 - Electromagnetics

3 Credits

The study of electrostatics, magnetostatics and time-varying fields in different coordinate systems using various laws and principles through the application of vector calculus and vector algebra. Analysis of transmission lines using both mathematical and graphical techniques. Offered fall semester. Prerequisite(s): ECCS 2311 and MATH 2631. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3121 - Energy Systems 1

4 Credits

Electric machines and power electronics. Analysis, performance characteristics, operation principles, and applications of power transformers, rotating machines, converters, inverters, and switched-mode power supplies. Computer Simulation. Integrated laboratory experience. Offered spring semester. Prerequisite(s): ECCS 3111. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3141 - Control Systems

4 Credits

Fundamental concepts of feedback control systems. Control systems analysis and design by conventional methods: transient-response and steady-state error analysis, root-locus analysis, time and frequency-based stability analysis, design and compensation techniques. Computer simulation. Integrated laboratory experience including programming of Programmable Logic Controllers (PLCs). Offered spring semester. Prerequisite(s): ECCS 2321. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3191 - Communication Systems

4 Credits

Analog and digital communication systems; modulation and demodulation techniques. Noise and bandwidth requirements. System design and performance analysis. Integrated laboratory experience. Offered spring semester. Prerequisite(s): ECCS 2321. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3241 - Embedded Systems

3 Credits

UML and model-based embedded system design, microprocessor/digital signal processor/network processor instruction sets, CPUs, bus-based system design, embedded computing platform, program design and analysis, real time operating systems and processes, hardware accelerators, networks and distributed embedded architectures, and systems design techniques, multicore embedded systems; integrated laboratory experimental activities. Offered spring semester. Prerequisite(s): ECCS 3351 or ECCS 3611. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3311 - Digital Signal Processing

3 Credits

Analog to digital and digital to analog conversions. Analysis of discrete-time signals and systems in both time domain and Z-domain. Design and implementation of FIR and IIR systems. Using MATLAB to simulate and model discrete-time systems. Integrated laboratory experience. Offered fall semester. Prerequisite(s): ECCS 2321. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3331 - Electronics

4 Credits

Analysis and design of analog and digital electronic circuits using semiconductor diodes, transistors and integrated circuits. Computer techniques will be combined with laboratory work for several projects. Offered fall semester. Prerequisite(s): ECCS 2311 and ECCS 2321 and ECCS 2721. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3351 - Microprocessors

3 Credits

Microprocessors and microcontroller system design, microprocessor structure, registers, RAM and ROM addressing, machine cycles and timing relationships, input and output ports and addressing, assembly level programming, embedded C programming, microcontroller structure, timer systems, analog-to-digital converters, serial and parallel communication, use of development systems and design simulators, embedded microcontroller design projects; integrated laboratory experimental activities. Offered fall semester. Prerequisite(s): ECCS 1611 and ECCS 2721. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3411 - Computer Security and Ethics

3 Credits

Social engineering, cryptography, access control, protocols, software vulnerabilities, risk analysis, attack methodologies, legal and ethical issues. Offered Fall Semester. Prerequisite(s): ECCS 2671. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Informed Ethical Responses.

ECCS 3431 - Theory of Computation

3 Credits

A mathematical approach to the theory of computation with emphasis on rigorous arguments of various sorts. Regular and Context-Free Languages. Turing machines. The implications of these issues to the discipline of computing. Offered fall semester. Prerequisite(s): MATH 3061. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3451 - User Interface Design

3 Credits

Human-Computer Interaction topics as related to graphical user interfaces encountered in software applications and web sites. User-centered interface development methodology and life cycle. Style, structure, layout, and organizational design guidelines. Color, typography, accessibility, globalization, and personalization issues. Offered fall semester. Prerequisite(s): ECCS 2671. Must be enrolled in one of the following Classifications: Junior, Senior. Course Attributes: Informed Responses-Aesthetics.

ECCS 3481 - Databases

3 Credits

Overview of data models and applications, database design with a focus on Relational Databases. Relational Algebra. Structured Query Language (SQL). Security issues. Offered spring semester. Prerequisite(s): ECCS 2671. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3611 - Computer Architecture

4 Credits

Aspects of computer hardware; computer arithmetic, micro-architecture design (both datapath and control unit), instruction sets, storage hierarchies, parallelism. Current families of microprocessors illustrating design tradeoffs. Integrated laboratory experience. Offered spring semester. Prerequisite(s): ECCS 2721. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3631 - Networks & Data Communications

3 Credits

The Internet Protocol Stack. Coverage of the application, transport, network, data link and physical layers with project assignments. Protocols used to implement communication over the Internet. Offered fall semester. Prerequisite(s): ECCS 2671. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3651 - Computer Vision

3 Credits

Extraction of useful information from captured images to make decisions about the real world, modeling cameras, calibration, feature extraction, feature synthesis, segmentation, still and video image processing. Define and produce an individualized course-long project that utilizes computer vision to solve a problem of the student's choice. Recommended: Matlab and/or C++ experience. Offered spring semester. Prerequisite(s): ECCS 1621 and MATH 1631. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3661 - Operating Systems

3 Credits

Operating systems principles. Processes. Threads. Interprocess communication. Scheduling. Memory Management. Virtual memory. Paging systems. File systems. Directory structure. Input/output. Disks. Clocks. Deadlock. Offered spring semester. Prerequisite(s): ECCS 2671. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 3901 - Special Topics

1 to 3 Credits

Selected topics in electrical or computer engineering or computer science of current interest. May be repeated for credit. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Computer Engineering, Computer Science, Electrical Engineering. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted.

ECCS 3951 - Independent Study

1 to 3 Credits

Individual study of topic in electrical or computer engineering or computer science of particular interest to the ECCS student. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Computer Engineering, Computer Science, Electrical Engineering. Must be enrolled in one of the following Classifications: Junior, Senior. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ECCS 3991 - External Research Experience

1 to 3 Credits Grading mode is S/U

A planned learning experience involving participation in an approved research project. A paper and an oral presentation regarding the research experience are required. Course Attributes: Requires Department Approval, Requires Instructor Approval.

ECCS 4111 - Energy Systems 2

3 Credits

Power systems fundamentals, single line diagrams and per unit calculations, transmission lines modeling, load flow techniques, economic dispatch, fault analysis, and power systems control. Computer simulation. Team-oriented design cases. Offered fall semester. Prerequisite(s): ECCS 3121. Must be enrolled in one of the following Classifications: Senior.

ECCS 4121 - Advanced Power

3 Credits

Selected advanced topics in power engineering. Offered spring semester. Must be enrolled in one of the following Classifications: Senior.

ECCS 4131 - Advanced Communications

3 Credits

Selected advanced topics in communications. Offered spring semester. Prerequisite(s): ECCS 3191. Must be enrolled in one of the following Classifications: Senior.

ECCS 4141 - Information Theory

3 Credits

Introduction to information theory; channel coding techniques and their trade-offs; compression techniques of voice, image, and video; encryption and decryption techniques. Offered spring semester. Prerequisite(s): ECCS 2721 and STAT 2501.

ECCS 4161 - Advanced Controls

3 Credits

Selected advanced topics in control systems. Offered spring semester. Prerequisite(s): ECCS 3141.

ECCS 4191 - System Design

1 Credit

Integration of different areas of electrical engineering in the design of a complete practical system. The process of defining the architecture, components, modules, and interfaces for a system to satisfy specified requirements. Offered fall semester. Must be enrolled in one of the following Classifications: Senior.

ECCS 4211 - VLSI System Design

3 Credits

VLSI Fabrication Process, CMOS logic gate implementations, combination logic networks, delay, power, interconnects, subsystem design, floorplanning and layout, architecture design, testing and verification. Computer simulation, integrated lab experience. Offered fall semester. Prerequisite(s): ECCS 2721 and ECCS 3331. Must be enrolled in one of the following Classifications: Senior.

ECCS 4311 - Advanced DSP

3 Credits

Selected topics in Digital Signal Processing techniques and their applications in 1-D and 2-D spaces. Offered fall semester. Prerequisite(s): ECCS 3311. Must be enrolled in one of the following Classifications: Senior.

ECCS 4321 - Computer Networks

3 Credits

Selected topics in computer/wireless networks. Offered spring semester. Prerequisite(s): ECCS 3631 or ECCS 3191. Must be enrolled in one of the following Classifications: Senior.

ECCS 4331 - Photovoltaic and Power Devices

3 Credits

Semiconductor and Electric Transport, Characteristics of Sunlight, Solar Cell: Properties and Design, PV cell interconnection and modules, Power Diodes and Breakdown Voltages, Power MOSFETs, IGBTs; Stand-alone Photovoltaic Systems; Grid-Connected Photovoltaic Systems. Offered fall semester. Prerequisite(s): ECCS 3121.

ECCS 4341 - Advanced Electronics

3 Credits

Advanced topics in electronics. Offered spring semester. Prerequisite(s): ECCS 3331. Must be enrolled in one of the following Classifications: Senior.

ECCS 4351 - Smart Grid

3 Credits

Smart Grid for efficient Power System; Resource Adequacy and Transmission Planning; Energy Efficiency; Power Production and Delivery; Wind/Solar power forecasting; Integration of intermittent renewable sources; DC Distribution; Probabilistic Reliability Evaluation; Energy Storage; Microgrids; Demand Side Management; Energy Efficiency; Electric End Use; Smart and Sustainable Buildings; Cyber-physical Systems; Cyber-security in Energy Grid. Offered spring semester. Prerequisite(s): ECCS 4111.

ECCS 4361 - Digital Image Processing

3 Credits

Digital image fundamentals: Spatial and frequency filtering; Image restorations, compression and segmentation. Offered fall semester. Must be enrolled in one of the following Classifications: Junior, Senior.

ECCS 4391 - Engineering Economy

1 Credit

Decision making based on criteria of economic factors including present worth, future worth, internal rate of return, cost benefit ratio, depreciation, and taxes. Offered fall semester. Must be enrolled in one of the following Classifications: Senior. Unlimited repeats permitted.

ECCS 4411 - Programming Languages

3 Credits

Constructs of programming languages in different programming paradigms: syntax analysis. Semantic analysis. Offered fall semester. Prerequisite(s): ECCS 2671. Must be enrolled in one of the following Classifications: Senior.

ECCS 4471 - Computer Science Capstone 1

2 Credits

Team-based design or research project in computer science. Application of design and development principles and methods as appropriate to a project featuring a relevant and current subject. Development and delivery of project proposal. Offered fall semester. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

ECCS 4481 - Computer Science Capstone 2

3 Credits

Continuation of Computer Science Capstone 1. Delivery of a project featuring a relevant and current subject. Demonstration and verification of project capabilities as appropriate to project. Development and delivery of documentation as appropriate to project. Offered spring semester. Prerequisite(s): ECCS 4471. Must be enrolled in one of the following Classifications: Senior.

ECCS 4711 - Senior Design 1

2 Credits

Initiation and proposal generation of senior design project as a team effort. Design process and project management are covered. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Computer Engineering, Computer Science, Electrical Engineering. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

ECCS 4721 - Senior Design 2

3 Credits

Continuation of Senior Design 1. Prototyping and project deliverables. Prerequisite(s): ECCS 4711. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Computer Engineering, Computer Science, Electrical Engineering. Must be enrolled in one of the following Classifications: Senior.

ECCS 4901 - Special Topics

1 to 3 Credits

Selected topics in electrical or computer engineering or computer science of current interest. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Computer Engineering, Computer Science, Electrical Engineering. Must be enrolled in one of the following Classifications: Senior. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ECCS 4951 - Independent Study

1 to 3 Credits

Individual study of topic in electrical or computer engineering or computer science of particular interest to the ECCS student. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Computer Engineering, Computer Science, Electrical Engineering. Must be enrolled in one of the following Classifications: Senior. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ECCS 4991 - Research Experience

1 to 3 Credits Grading mode is S/U

A planned learning experience involving participation in an approved research project. A paper and an oral presentation regarding the research experience are required. Course Attributes: Requires Department Approval, Requires Instructor Approval.

DEPARTMENT OF MECHANICAL ENGINEERING

Professors Yoder (*Chair*), Rider, Marquart; **Associate Professors** Sawyers, Shen, Mikesell; **Assistant Professors** DiBerardino, Hylton, Laird (*Director of Corporate and Alumni Relations*)

Mission Statement

The mechanical engineering department enables students to acquire the skills needed for lifelong success and be prepared for professional practice and further studies.

Program Education Objectives

Graduates of the Mechanical Engineering program will attain:

1. Success in their chosen profession.
2. Recognition for their ability to communicate effectively with a variety of audiences and to work with people of various backgrounds.
3. Respect by working in a dedicated, competent, and ethical manner.
4. Professional development through continued studies.

Subject - Mechanical Engineering (ME)

ME 1411 - Engineering Material Science

3 Credits

Fundamental physical and microstructural characteristics of materials and how these relate to their mechanical properties. Evaluation of these properties for material selection. Metallurgical aspects including equilibrium diagrams. Includes hands-on experiences in material science. Offered spring semester. Prerequisite(s): CHEM 1501.

ME 1901 - Special Topics

1 to 3 Credits

Selected topics of current interest in mechanical engineering. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Unlimited repeats permitted.

ME 1951 - Independent Study

1 to 3 Credits

Independent study of a topic of particular interest to the student in mechanical engineering. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ME 2311 - Thermodynamics

3 Credits

Fundamentals of classical thermodynamics. Work, heat transfer, and thermodynamic properties. The First and Second Law of Thermodynamics. Application to power and refrigeration cycles, humidity and air conditioning. Offered spring semesters. Prerequisite(s): PHYS 2311.

ME 2511 - Computer Applications

3 Credits

Mechanical engineering problem solving using computer software, including MATLAB. Prerequisite(s): ENGR 2131 or PHYS 2311.

ME 2901 - Special Topics

1 to 3 Credits

Selected topics of current interest in mechanical engineering. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Unlimited repeats permitted.

ME 2951 - Independent Study

1 to 3 Credits

Independent study of a topic of particular interest to the student in mechanical engineering. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ME 3111 - Mechanical Design 1

3 Credits

Introduction to mechanical design with the computer used as a tool for design. Synthesis and analysis of linkages along with gear train and cam design. Offered fall semester. Prerequisite(s): ENGR 2141 and (ME 2511 or ECCS 1611).

ME 3121 - Mechanical Design 2

3 Credits

Advanced mechanics of materials. Design and selection of various machine elements such as screws, bearings, welds, and gears, etc. Offered spring semester. Prerequisite(s): ME 3111 and ENGR 2231.

ME 3131 - 3-D Modeling and Design

3 Credits

Introduction to mechanical design applications with the computer used as a tool. Emphasis on solid modeling, simulation, design layout, and geometric dimensioning and tolerancing. Must be enrolled in one of the following Classifications: Junior, Senior.

ME 3211 - Dynamic Systems 1

3 Credits

Fundamentals of dynamic system behavior. Mathematical modeling of mechanical, fluid, and electrical systems; analytical and computer solution methods. Laplace transforms, transfer function and state variable methods. Free and forced vibration analysis, vibration suppression, multiple DOF systems. Offered fall semester. Prerequisite(s): MATH 2651 and ENGR 2141 Minimum Grade of C and ECCS 2311.

ME 3221 - Dynamic Systems 2

4 Credits

Modeling, analysis and design of linear feedback control systems. Transfer function and state space methods. Frequency response. Digital logic and controls. Laboratory work in digital logic design and performance studies of real systems. Prerequisite(s): ME 3211.

ME 3231 - Automotive Engineering

3 Credits

Studies in land vehicle dynamics and driveline systems. Specific topics include acceleration and braking performance, steering, suspensions, tires and current developments in powertrain and safety systems. Prerequisite(s): (ME 3211 or ECCS 2321).

ME 3311 - Fluid Mechanics

3 Credits

Fundamentals of fluids phenomena, including hydrostatics, conservation of mass, momentum, and energy, dimensional analysis, internal and external flow, and turbo machinery. Offered fall semester. Prerequisite(s): MATH 2651 and ME 2311.

ME 3321 - Heat Transfer

3 Credits

Principles of the three mechanisms of heat transfer (conduction, convection, radiation) in solid, fluid and vacuum media. Development of the control volume approach, as well as numerical solution techniques. Heat exchanger performance and design. Applications to engineering problems and systems. Offered spring semester. Prerequisite(s): PHYS 2311 and MATH 2651 and ME 3311.

ME 3331 - Thermal Sciences Lab

1 Credit

Development and conduction of experiments in thermodynamics, fluid mechanics, and heat transfer. Prerequisite(s): ME 2311 and ME 3311. Corequisite(s): ME 3321.

ME 3341 - Fluid Transfer

1 Credit Grading mode is S/U

Fundamental concepts of fluid flow. Laminar and turbulent flow regimes. Conservation of energy and friction losses in pipe flow. Lift and drag forces resulting from external flow over solid objects. Dimensionless parameters, including Reynolds number, friction factor, and Drag Coefficient. Course Attributes: Requires Instructor Approval.

ME 3411 - Manufacturing Laboratory

1 Credit

Introduction to the machines and processes involved in manufacturing. Students will learn the basic theory of and manufacture parts using the following methods: sand casting, welding, rapid prototyping, plasma cutting, and machining (mill, lathe, drill press). Offered fall semester. Must be enrolled in one of the following Major fields of study: Mechanical Engineering.

ME 3421 - Manufacturing Processes

3 Credits

Manufacturing engineering and technology including casting, rolling, forging, extrusion, drawing, sheet metal forming, machining, and welding. Theoretical as well as practical considerations. Quality control and statistical methods. Prerequisite(s): ME 1411.

ME 3511 - Experimental Methods

2 Credits

Use of experimental procedures and equipment typical in mechanical engineering practice. Uncertainty analysis and experimental design. Presentation of experimental data. Development of labVIEW applications. Offered fall semester.

ME 3521 - Finite Element Analysis

3 Credits

The finite element method techniques are studied. These techniques are used to solve engineering continuum problems, both 'by hand' and using the general purpose commercial FEA package, ANSYS. Applications to engineering design of static and dynamic structures, as well as thermal systems. Offered spring semester. Prerequisite(s): ENGR 2231.

ME 3611 - Aircraft Design

3 Credits

Fundamental aspects of aircraft design, incorporating concepts such as range, mission requirements, flight conditions, propulsion, appendage and fuselage design, as well as stability and control. Students will work in teams to develop a preliminary concept for an aircraft and present that design to the class. Prerequisite(s): ME 3311. Must be enrolled in one of the following Colleges: Engineering. This course is repeatable for a total of 3 hours.

ME 3901 - Special Topics

1 to 3 Credits

Selected topics of current interest in mechanical engineering. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Unlimited repeats permitted.

ME 3951 - Independent Study

1 to 3 Credits

Independent study of a topic of particular interest to the student in mechanical engineering. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

ME 4011 - Process of Design

3 Credits

The process of design is covered with a focus on problem-solving methodology, project management, and engineering economy. Teamwork tools and design are used on a team project. Offered fall semester. Corequisite(s): ME 4111. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Must be enrolled in one of the following Classifications: Senior. Course Attributes: Critical and Creative Thinking, Effective Communication Writing.

ME 4111 - Capstone 1

1 Credit

Initiation of capstone design project as a team effort. Offered fall semester. Corequisite(s): ME 4011. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Must be enrolled in one of the following Classifications: Senior.

ME 4121 - Capstone 2

2 Credits

Completion of capstone design project as a team effort. Offered spring semester. Prerequisite(s): ME 4111. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Must be enrolled in one of the following Classifications: Senior.

ME 4211 - Industrial Controllers

3 Credits

Applications in control systems concentrating on PLCs and ladder logic. Advanced control theory explored. Laboratory work concentrates on PLC applications. Offered fall semester. Prerequisite(s): ME 3221 or ECCS 3141 or ECCS 2721 or ECCS 2721. Concurrency allowed.

ME 4221 - Intelligent Systems

3 Credits

Students will learn to model complex systems. Systems from a variety of disciplines will be used. Students will apply a variety of algorithms to control and test these systems in a laboratory setting. Offered spring semester. Prerequisite(s): ME 3211 or ECCS 3141.

ME 4231 - Robotics

3 Credits

An introduction to topics in robotics. Topics will include robot kinematics, motion planning, mobile robots, robot sensors, and artificial intelligence. Students will complete projects using robots.

ME 4311 - Computational Fluid Dynamics

3 Credits

The theory and methods of computational fluid dynamics, including grid generation, flow solution, and postprocessing analysis. Implicit and explicit methods are studied, as well as direct and iterative solution techniques, and stability criteria. Students work with Pointwise, Cobalt, and Fieldview. Lab time is primarily spent using commercial CFD codes to perform flow analyses, but some computer programming may be required. Offered fall semester. Prerequisite(s): ME 3311.

ME 4321 - Renewable Energy

3 Credits

An overview of renewable energy sources such as solar, wind, water, and biomass. Current and potential technologies for extracting, storing, and converting renewable energy into electricity. Economic and social issues that impact renewable energy projects. Offered spring semester. Prerequisite(s): ME 2311.

ME 4331 - Advanced Thermodynamics

3 Credits

Application of thermodynamic laws to the analysis of advanced cycles and processes. Modifications to the basic Rankine, Brayton and piston engine power cycles, including topping cycles and cogeneration. Basic and advanced refrigeration and heat pump cycles. Prerequisite(s): ME 2311.

ME 4411 - Biomaterials and Medical Devices

3 Credits

Properties and application of materials that are used in contact with biological systems. Structures and properties of human tissues. Biomechanics related to implant design. Host reactions to implants. Offered fall semester. Prerequisite(s): ME 1411.

ME 4511 - Engineering Analysis

3 Credits

Solution of a wide range of mechanical engineering problems using various analytical and numerical techniques. Prerequisite(s): ME 2511 and ME 3121 and ME 3221 and ME 3321 and ME 3321. Course Attributes: Scientific and Quantitative Literacy.

ME 4901 - Special Topics

1 to 3 Credits

Selected topics of current interest in mechanical engineering. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Unlimited repeats permitted.

ME 4951 - Independent Study

1 to 3 Credits

Independent study of a topic of particular interest to the student in mechanical engineering. Must be enrolled in one of the following Colleges: Engineering. Must be enrolled in one of the following Fields of Study: Mechanical Engineering. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.



THE RUDOLPH H. RAABE COLLEGE OF
Pharmacy

THE RUDOLPH H. RAABE COLLEGE OF Pharmacy

Steven J. Martin, *Dean*

Accreditation and Affiliations

The Raabe College of Pharmacy's Doctor of Pharmacy degree program is accredited by the Accreditation Council for Pharmacy Education (ACPE). The degree is recognized by the Board of Pharmacy of the State of Ohio as meeting the educational requirement for licensure examination. The College of Pharmacy is a member of the American Association of Colleges of Pharmacy, and the Council of Ohio Colleges of Pharmacy.

Departments

Department of Pharmaceutical and Biomedical Sciences (PHBS)
Department of Pharmacy Practice (PHPR)

Office

Office of Experiential Education (OEE)

Vision Statement

We create leaders who revolutionize the profession and practice of pharmacy.

Mission Statements

As the teacher/scholars of pharmacy education, we are committed to:

- nurturing leaders
- creating professionals who contribute to the greater good of society
- advancing the profession and the practice of pharmacy

Admission Standards

Persons seeking admission to the College must provide the necessary information and meet the general requirements for admission to the University as listed in that section of this catalog. Selected applicants are required to complete a personal interview.

High School Graduates. It is recommended high school graduates should have completed college preparatory courses including four units of English, four units of mathematics and four units of science (biology, chemistry, and physics recommended) and six units of history, social studies, languages or any combination thereof.

Transfer Students. A student desiring to transfer from another accredited college or university must present authenticated academic transcripts from all institutions attended. Credit will be allowed for any course in which a grade of C or better was received provided such work is parallel to the requirements for graduation from this institution (grades of C- are not transferable). Grades of P (passing) or S (satisfactory) are accepted when the academic institution certifies their equivalence to a C or better. Approval for admission and advanced placement will be determined upon review of the student's previous record. Students entitled to advanced standing may enter at the time approved by the dean of the College of Pharmacy. All transfer decisions are based on space availability in the program.

Doctor of Pharmacy Degree Requirements

The Doctor of Pharmacy program is an advanced professional program that provides a foundation in the basic sciences of pharmacy as well as a comprehensive understanding of health care settings. Specifically, the graduate will have training in clinical skills which will allow entry into advanced practice settings. The program of study leading to the degree of Doctor of Pharmacy is a combination of general education courses, basic sciences, professional pharmacy courses, and electives.

This program requires a minimum of 216 semester hours of study divided according to the following:

General education courses	30 hours
Basic science courses	44 hours
Professional courses	131 hours
Electives	11 hours

Pharmacy General Education Requirements.

The general education component of the pharmacy degree curriculum consists of 30 semester hours and intends to contribute significantly to the student's becoming an educated professional and a responsible citizen. These foundation courses conform to the university general education learning objectives as previously stated on page 21.

Communication Competence

Writing Seminar
Oral Communication

Culture and Society

Social Science
Literature
History
Business Foundation

Aesthetic Sensibility

Fine Arts

Human Values

World Religious Perspective
Ethics
Extra-disciplinary Seminar

An approved Honors Seminar may fulfill a requirement listed above. For specific information, see the office of the dean.

Basic Science Requirements.

Basic sciences are needed in the pharmacy curriculum to provide not only the background required for professional pharmacy courses but also to contribute to developing a scientific literacy necessary to function in an increasingly complex and technical world.

Introductory Chemistry 1711, 1721
Organic Chemistry 2511, 2521, 2551, 2561
General Biology 1201
Human Anatomy and Histology 1351
Physiology 3311, 3321
Biosciences Laboratory 3221
Medical Microbiology 3131
Calculus and Probability in Life Sciences 1471
Statistics for Pharmacy 1761

Professional Pharmacy Requirements.

Courses offered by the departments of Pharmaceutical and Biomedical Sciences and Pharmacy Practice as well as the collaborative efforts demonstrated in the area of Biomedical Science and Patient Care, are designed to meet the intellectual standards that are expected of the modern pharmacist, including the high ethical behavior American society envisions of its pharmacists.

Pharmaceutical and Biomedical Sciences

Applied Sciences of Pharmacy 2901
Biochemistry 3411, 3421
Immunology 3751
Pharmaceutical Sciences Modules 3311, 4321
Biomedical Sciences Modules 4431, 4441

Pharmacy Practice

The Profession of Pharmacy 1011, 1021, 2011, 2021, 3011
Lifetime Wellness for Pharmacy 1151
OTC/Home Diagnostics 3311
Professional Pharmacy Skills 3021, 4011
Pharmacy Therapeutic Modules 4411, 4421, 5431, 5441, 5451, 5471
Capstone 5461
Pharmaceutical Administration Module 5501
Special Populations 5531
Advanced Pharmacy Practice Experiences 6501-6509

Electives

Elective course hours for the pharmacy program may be selected from courses in Arts & Sciences, Business Administration, and the College of Pharmacy. Students may plan elective courses for personal enrichment or to satisfy a minor; a secondary academic program, or a dual degree.

Doctor of Pharmacy Degree Curriculum

First Year

Introductory Chemistry 1711, 1721	10 hours
General Biology 1201	4 hours
Human Anatomy and Histology 1351	4 hours
Calculus and Probability for Life Sciences 1471	3 hours
The Profession of Pharmacy 1011, 1021	4 hours
Wellness Fitness/Life Activity	1 hour
General Education/Electives	12 hours
TOTAL	36 hours

Second Year

The Profession of Pharmacy 2011, 2021	4 hours
Organic Chemistry 2511, 2521, 2551, 2561	8 hours
Statistics for Pharmacy 1761	3 hours
Applied Sciences of Pharmacy 2901	3 hours
Medical Microbiology 3131	3 hours
General Education/Electives	15 hours
TOTAL	36 hours

Third Year

The Profession of Pharmacy 3011	2 hours
Professional Pharmacy Skills Module 1 3021	3 hours
Biochemistry 3411, 3421	6 hours
OTC/Home Diagnostics 3311	3 hours
Physiology 3311, 3321	8 hours
Pharmaceutical Sciences 3311	2 hours
Biosciences Laboratory 3221	1 hour
General Education/Electives	11 hours
TOTAL	36 hours

Fourth Year

Pharmaceutical Sciences Modules 4321	6 hours
Biomedical Sciences Modules 4431, 4441	11 hours
Professional Pharmacy Skills Module 2 4011	4 hours
Pharmacy Therapeutics Module 1 4411	6 hours
Pharmacy Therapeutics Module 2 4421	6 hours
Electives	3 hours
TOTAL	36 hours

Fifth Year

Pharmacy Therapeutics Module 3 5431	5.5 hours
Pharmacy Therapeutics Module 4 5441	3.5 hours
Pharmacy Therapeutics Module 5 5451	3.5 hours
Pharmacy Therapeutics Module 6 5471	5.5 hours
Pharmacy Administration 5501	6 hours
Capstone 5461	6 hours
Special Populations 5531	3 hours
Electives	3 hours
TOTAL	36 hours

Sixth Year

Advanced Pharmacy Practice Experiences 6501-6509	36 hours
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General Administrative and Academic Regulations

General administrative and academic regulations for the College of Pharmacy are established by the dean and faculty of the college to assist students as they select courses and attempt to fulfill graduation requirements. Additional regulations may be adopted during the academic year or changes may be made to the following:

1. Students who wish to register for more than 19 hours of academic studies in a single semester need the written permission of the dean of the College of Pharmacy.

2. A pharmacy student may take no more than six semester hours in any summer term with a maximum of twelve semester hours, total, for the two summer terms.
3. A prerequisite for the introductory and the advanced pharmacy practice experiences (PHPR 6501-6509) is a certificate of registration as an Ohio pharmacy intern. The Ohio Board of Pharmacy may deny the issuance of the certificate if an individual has been convicted of a felony, has been convicted of violating any state or federal pharmacy or drug law, is not of good moral character and habits, is addicted to or abusing liquor or drugs, has been disciplined by the Ohio Board of Pharmacy pursuant to section 4729.16 of the revised code, or has been disciplined by any board of pharmacy (OAC 4729-5-04).
4. Students registered for an advanced pharmacy practice experience who wish to register for any additional elective courses need the written permission of the experiential office and the dean of the College of Pharmacy prior to registering for the additional courses.
5. Students should not expect to register for courses that have conflicting time schedules. On rare occasions a student may be allowed to do so. The student will need the written permission of both the faculty members.
6. Students are encouraged to register for activity courses in art, music, theatre, and health and physical education. There is no maximum number of activity course credits that may be used for fulfilling elective graduation requirements.
7. All pharmacy students in the Lower Division (P1-P3 Ranking) must have a cumulative GPA of 2.00 or higher and a letter grade of "C" or better in all required courses prior to entering the P4 year. Those students not meeting this requirement will maintain the class rank of P3 and may not take any P4 level course work until all stated requirements are met.

Rules 8-8.4 pertain to P1-P3 "Lower Division" students.

8. A warning letter will be sent to the student and advisor with the first deficient grade of (D or F), regardless of the student's overall cumulative grade point average (GPA).
- 8.1 Students receiving a 2nd deficient grade (D or F), regardless of overall GPA, in any course work will receive a second warning letter.
- 8.2 A third deficient grade (D or F), regardless of overall GPA, in any course work will cause the student to be suspended for up to 1 year.
- 8.3 A fourth deficient grade (D or F), regardless of overall GPA, in any course work will cause the student to be suspended for at least 1 year.
- 8.4 A student receiving a 5th deficient grade (D or F) in any course work, regardless of GPA, will result in dismissal from the College of Pharmacy.

Rules 9-9-2 pertain to P4-P6 "Upper Division" students.

9. All students who receive a deficient grade during the first parts of a semester (e.g. the first PHPR module of two or three normally taken in succession in a single semester) are permitted to take the subsequent module(s) in that semester.
- 9.1 All students enrolled in either the first, second or third of two or three sequential modules offered in the same semester may drop any module before, completing 80% of class days in that module.
- 9.2 For PHPR and/or PHBS required course work, students who earn a letter grade of "D" in one upper division course are eligible for course "Remediation" (see the College Handbook for additional information). Students earning a letter grade of "F" and/or a second letter grade of "D" must repeat all upper division courses for which letter grades of "D and/or F" were earned

Rules 10-10.3 pertain to all students P1-P6.

10. All students who are repeating courses or modules because of earned "D" or "F" grades will have a maximum of three (3) opportunities (two repeat attempts) to earn a grade of C or better. Failure to earn a "C" or better after the second repeat attempt (third time total) will result in the student's dismissal from the College of Pharmacy.
- 10.1 All PHPR and PHBS letter grades are utilized (including repeated courses) when calculating a student's cumulative grade point average (GPA).
- 10.2 Except where noted, credit hours earned in repeated courses can be counted only one time among the total hours required for graduation.

10.3 All Doctor of Pharmacy degree requirements must be completed no later than two years after the anticipated graduation date from the time the student first enrolls in the Raabe College of Pharmacy. A verifiable personal emergency may justify an extension as determined by the dean or dean's designate of the Pharmacy College.

This academic action rule is effective for all students in the program. Continuing students in academic year 2009-10 will be held to the anticipated graduation date as of the start of the 2009-2010 academic year.

S/U Grade Option

Students may utilize the S/U grade option only as noted in the College of Pharmacy catalog course descriptions. Otherwise, students are not permitted to register for courses on an S/U basis if the course is offered on a graded basis.

Classification of Students

Students may be advanced to the following classifications upon meeting the stated requirements.

P-2: a minimum of 36 semester hours of credit including completion of the following courses or their articulated equivalent: Chemistry 1711, 1721; Biology 1201, 1351; PHPR 1011, 1021 and Math 1471.

P-3: a minimum of 72 semester hours of credit including completion of the following courses or their articulated equivalent: Chemistry 2511, 2521, 2551, 2561; Statistics for Pharmacy 1761; PHPR 2011, 2021 and Applied Sciences of Pharmacy; PHBS 2901.

P-4: a minimum of 108 semester hours of credit including completion of all lower division basic science and pharmacy course work, plus completion of all general education requirements.

P-5: a minimum of 144 semester hours of credit.
A cumulative GPA of 2.00 or higher and have successfully completed Pharmacy Therapeutics Modules PHPR 4411, 4421; PHBS 4321, 4441; and PHPR 4011.

P-6: a minimum of 180 semester hours of credit.
A cumulative GPA of 2.00 or higher and have successfully completed Pharmacy Therapeutics Modules PHPR 5431, 5441, 5471; 5501 modules and received a letter grade of "C" or better in PHPR 5461.

Other information relative to the requirements for reclassification of standing may be obtained in the office of Pharmacy Student Services of the College of Pharmacy.

Academic Standing

A student who fails to maintain the prescribed standards of scholarship will be subject to one of the following actions, namely: 1) probation, 2) continued probation, 3) suspension from the college, or 4) dismissal from the college.

Following the first semester a student's cumulative grade point average (GPA) falls below 2.00, the student will be placed on probation. If a student on probation fails to obtain good academic standing (cumulative GPA 2.00 or higher) after the following semester, the student will be placed on continued probation. If good academic standing is not achieved by the end of the following semester, the student should expect to be suspended. Any student with a semester GPA of less than 1.00 may be placed on probation or suspended. When a student is on probation, the college may impose special conditions for continued enrollment. Students on probation cannot participate in competitive activities of individuals, teams, or other groups officially designated as representing the University.

When action is taken to suspend a student, the suspension will be for a specified period of time after which the student will be eligible to apply for readmission. Readmission is not automatic. If readmission is granted, the faculty will establish specific conditions of academic performance expected of the student. A semester GPA of less than 2.00 in any of the first two semesters after readmission may lead to dismissal. Dismissal is a terminal action and the student is not eligible to apply for readmission to the College of Pharmacy at any time thereafter.

Pharmacy/Biology Dual Degrees Program

The pharmacy/biology dual degrees program is a six-year curriculum that provides for educational, practice and research experiences in both pharmacy and biology. The Doctor of Pharmacy degree and the biology degree are awarded upon completion of the program of study. A more detailed description about this program is available from the Office of Student Services in the College of Pharmacy or the Department of Biological and Allied Health Sciences Office.

Dual Degree Programs

Information concerning other undergraduate dual degree programs involving the College of Pharmacy appears on page 22 of this catalog. Students may receive further details in the Office of Pharmacy Student Services.

Student Services

The College of Pharmacy provides specialized services to students and alumni through the staff of the Office of Pharmacy Student Services, including college admissions, academic advising, personal counseling, career counseling, and job placement. The staff of the office also coordinates professional organization functions, student group activities, and serves as the focus for special project planning and implementation.

Student Conduct

Students enrolled in the College of Pharmacy are expected to uphold high professional standards. The use or possession of narcotics, stimulants, or hallucinogens without the supervision of his/her own physician is unacceptable conduct and can subject the student to dismissal. A student who has been convicted of a felony or who has violated any state or federal pharmacy or drug law can be dismissed from the college.

Special Notice

Because of rapid developments in the health professions, the curriculum and academic standards of the College of Pharmacy are constantly being reviewed by the faculty. The faculty of the college reserves the right, without advance notice, to change the content, duration and sequence of any course included in the curriculum, or to increase or decrease the number of credit hours leading to the degree. The faculty also reserves the right without advance notice to change the academic standards of the college.

DEPARTMENT OF PHARMACEUTICAL & BIOMEDICAL SCIENCES

Professors Christoff, Kinder; **Associate Professors** Mahfouz, Rojeab, Olah (*Chair*), Rorabaugh, Stockert; **Assistant Professors** Chrissobolis, D'Souza, Koh

Subject - Pharmaceutical and Biomedical Sciences (PHBS)

PHBS 2901 - Applied Sciences of Pharmacy

3 Credits

Fundamental principles and professional applications of basic and applied sciences, such as physics and biostatistics, are explored in relation to advanced science topics and integrated clinical sciences. Drug discovery and development, medical imaging, and the science of alternative medicine are discussed in the context of applications to pharmacy practice. The Human Genome Project is described and a method of DNA sequencing is presented with specific application to pharmacy. Model drug compounds are presented to illustrate the critical need for thorough understanding and broad integration of basic science principles when considering the multitude of related professional applications in the practice of pharmacy. Offered spring semester. Prerequisite(s): PHPR 2011 Minimum Grade of C. This course may be repeated 2 times. Course Attributes: Integration Across Disciplines.

PHBS 3311 - Pharmaceutical Sciences 1

2 Credits

Physical pharmacy applications in the pharmaceutical sciences. Application of physicochemical principles applied to pharmaceutical preparations. Offered spring semester. Prerequisite(s): (PHBS 3411 or PHBS 341) and (PHPR 3011 or PHPR 301) and (PHPR 3311 or PHPR 331). This course may be repeated 2 times. Course Attributes: Critical and Creative Thinking, Scientific and Quantitative Literacy.

PHBS 3411 - Biochemistry 1**3 Credits**

The chemistry of living organisms with emphasis on the human system. Topics include acid-base balance, buffers, chemistry of amino acids, proteins, enzymes, carbohydrates, lipids, vitamins, nucleic acids and porphyrins. Biochemical genetics and genetic disorders are also covered. Offered fall semester. Prerequisite(s): (CHEM 253) or (CHEM 2521 and CHEM 2561). This course may be repeated 2 times.

PHBS 3421 - Biochemistry 2**3 Credits**

The major metabolic processes that are essential for human life, including biochemical energetics, the electron transport system, Krebs cycle, the metabolism of carbohydrates, lipids and amino acids, and the biosynthesis of purines, pyrimidines, nucleic acids and proteins. Offered spring semester. Prerequisite(s): PHBS 3411 or PHBS 341. This course may be repeated 2 times.

PHBS 3501 - Basic Nutrition**2 Credits**

Basic principles of nutrition for Pharmacy and non-Pharmacy students. Topics include a description of essential nutrients, methods of evaluating individual dietary adequacy, and dietary methods for weight control. Offered spring semester. This course may be repeated 2 times.

PHBS 3751 - Immunology**3 Credits**

Modern immunology and immunotherapy. The principles of basic and clinical immunology, historical background, host defense mechanisms, types of immune responses, nature of antigens and antibodies, antigen-antibody interactions leading to immunological disease, and transplantation and cancer immunology. The use of immunobiologicals currently available in the USA for prevention and treatment of most common infections and immunologic diseases. The role of biotechnology as a source of immunobiologicals will be discussed. Offered spring semester. Prerequisite(s): (PHBS 3411 or PHBS 341 or CHEM 3111). This course may be repeated 2 times.

PHBS 4321 - Pharmaceutical Sciences 2**6 Credits**

Basic and clinical pharmacokinetics, and concepts of pharmacokinetics related to physiology and pathophysiology. Pharmaceutic and biopharmaceutic aspects of a variety of drug dosage forms and delivery systems. Offered fall semester. Prerequisite(s): PHBS 3311 and PHBS 3421 and PHBS 3751. This course may be repeated 2 times.

PHBS 4431 - Biomedical Sciences 1**5 Credits**

An interdisciplinary focus on the mechanisms by which diseases, drugs and chemicals alter normal biochemical and physiological processes. The sciences of pathophysiology, pharmacology, toxicology, and medicinal chemistry are integrated to provide an in-depth understanding of these mechanisms. The course progresses from factors affecting sub-cellular mechanisms to those of whole organ systems. Includes small group recitation and student-presented seminar sections in order to introduce the basic and clinical scientific literature and provide activities which illustrate the pharmacotherapeutic applications of the material. Offered fall semester. Prerequisite(s): PHBS 3311 and PHBS 3421 and PHBS 3751. This course may be repeated 2 times.

PHBS 4441 - Biomedical Sciences 2**6 Credits**

Continuation of PHBS 4431. Offered spring semester. Prerequisite(s): (PHBS 4431 or PHBS 443) and (PHBS 4321 or PHBS 432). Must have one of the following Student Attributes: P4. This course may be repeated 2 times.

PHBS 5621 - Survey of Research Areas in the Pharmaceutical and Biomedical Sciences**1 Credit Grading mode is S/U**

Presentation of the research areas in the pharmaceutical and biomedical areas. Opportunities in these areas are defined. Offered spring semester. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times.

PHBS 5651 - Research in the Pharmaceutical and Biomedical Sciences**2 Credits**

A research experience for students who may pursue graduate studies in the pharmaceutical or biomedical sciences or related areas. Participation in all aspects of the design, implementation, model preparation, instrumentation, and reporting of specific research problems. Offered fall and spring semesters. This course may be repeated 8 times. Course Attributes: Critical and Creative Thinking, Scientific and Quantitative Literacy.

PHBS 5901 - Special Topics in Pharmaceutical and Biomedical Sciences**1 to 3 Credits**

Distinct special topics in the pharmaceutical and/or biomedical sciences. Offered fall and spring semesters. This course may be repeated 2 times. Course Attributes: Requires Instructor Approval.

PHBS 5971 - Independent Study - Pharmaceutical and Biomedical Sciences**1 to 3 Credits**

Independent study in the pharmaceutical and/or biomedical sciences. Offered fall and spring semesters. This course may be repeated 8 times.

DEPARTMENT OF PHARMACY PRACTICE

Professors Allison, K. Kier, Roecker (*Chair*), Sobotka;
Associate Professors DiPietro, Finley-Sobota, Partelano, Reilly-Kroustos, Shields; **Assistant Professors** Adane, Hethcox, Hinson, Kline, Leonard, Musser, Peters, Petersen; **Instructors** T. Kier, Myers

OFFICE OF EXPERIENTIAL EDUCATION

Associate Professor Partelano (*Director*), **Assistant Professor** Kline (*Assistant Director*) **Clinical Professors** Bates, Bellman, Bestic, Bishop, Branch, Broshe, Caudill, Daberko, Dotson, Ford, Garman, Gardner, Grubaugh, Guidos, Harger, Hartzell, Hoffmann, Hoffmaster, Hulisz, Hunsicker, Kauflin, Keller, Kimbrel, Kristufek, Leifheit, Miller, C. Myers, R. Myers, Owens, Pierce, Plogsted, Ruef, Rush, Sabol, Sillaman, Spicer

Subject - Pharmacy Practice (PHPR)**PHPR 1011 - The Profession of Pharmacy 1****2 Credits**

The profession of pharmacy, the delivery of patient care, and the operation of the University and College of Pharmacy will be covered. Traditional classroom presentations are reinforced through structured experiential rotations in a variety of health care and service learning sites. Offered fall semester. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 1 hour. Course Attributes: Critical and Creative Thinking.

PHPR 1021 - The Profession of Pharmacy 2**2 Credits**

Continuation of PHPR 1011. Offered spring semester. Prerequisite(s): PHPR 1011. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 1 hour. Course Attributes: Informed Ethical Responses.

PHPR 1151 - Lifetime Wellness for Pharmacy Professionals**1 Credit**

Lecture and lab course covering the essential elements of wellness. Topics include: fitness components, weight management, nutrition, stress management, emotional health, and behavior modification strategies. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Pharmacy. Must have one of the following Student Attributes: Pharmacy First Year. This course may be repeated 2 times. This course is repeatable for a total of 1 hour.

PHPR 1191 - Special Topics in Pharmacy**1 to 3 Credits**

Topics in pharmacy. Enrollment is restricted to students with specific pharmacy/biomedical experiences, such as attendees of programs such as Summer Honors Institute or Project Lead The Way. May be repeated as topics or experiences vary. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Pharmacy. Unlimited repeats permitted. Course Attributes: Requires Department Approval.

PHPR 1911 - ST-Summer Honors Institute

1 Credit Grading mode is S/U

Topics in Pharmacy for the Summer Honors Institute only. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

PHPR 1921 - Special Topics in Pharmacy

1 to 3 Credits

Topics in Pharmacy which may be repeated as topic varies. Must be enrolled in one of the following Colleges: Pharmacy. Must be enrolled in one of the following Fields of Study: Pharmacy. Unlimited repeats permitted. Course Attributes: Requires Instructor Approval.

PHPR 2011 - The Profession of Pharmacy 3

2 Credits

Continuation of professional development and understanding of pharmacy services and patient care delivery. Addresses issues relevant to pharmacy internship and advanced pharmacy course work. Offered fall semester. Prerequisite(s): PHPR 1021. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 2 hours. Course Attributes: Scientific and Quantitative Literacy.

PHPR 2021 - The Profession of Pharmacy 4

2 Credits

Continuation of PHPR 2011. Offered spring semester. Prerequisite(s): PHPR 2011. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 2 hours. Course Attributes: Effective Communication Non-Writing.

PHPR 2211 - Peer Student Mentorship

1 Credit

A seminar for students serving as peer mentors for incoming pharmacy students. This seminar will include readings and projects to help students develop as a peer mentor. Students will be required to participate in reflection on and planning of mentor work. Offered fall term only. Prerequisite(s): PHPR 1021. Must be enrolled in one of the following Colleges: Pharmacy. This course is repeatable for a total of 4 hours.

PHPR 2301 - Ethics in Professional Practice

2 Credits

Guided discussions show there are ethical problems in life and there are better and worse ways of dealing with those problems. Offered spring semester. Must have one of the following Student Attributes: PHARMACY FOURTH OR FIFTH YEAR.

PHPR 2411 - Contemporary Health Care Issues and Opportunities 1

2 Credits

Multiple practice settings including retail, institutional, manufacturing, distribution, association, government and how each is implementing a pharmaceutical care mission. Offered fall semester. Prerequisite(s): PHPR 1021 or PHPR 103. Must be enrolled in one of the following Colleges: Pharmacy, Business Administration. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business, Pharmacy.

PHPR 2421 - Contemporary Health Care Issues and Opportunities 2

2 Credits

Current topics from multiple practice settings including retail, institutional, manufacturing, distribution, health care/pharmacy associations, and government will be discussed and includes how each is implementing a patient care and pharmaceutical care mission. Offered spring semester. Prerequisite(s): PHPR 1021 or PHPR 103. Must be enrolled in one of the following Colleges: Pharmacy, Business Administration. Must be enrolled in one of the following Fields of Study: Pharmaceutical Business, Pharmacy. May not be enrolled in one of the following Classifications: Freshman.

PHPR 2511 - Preventative Medicine: Issues and Education

2 Credits

Important health issues in the United States and the applications these disease states have on individual health, health care costs, and productivity. Special emphasis on learning teaching methods that can be effective in increasing public awareness and modifying behavior in order to prevent disease. Offered spring semester. Must be enrolled in one of the following Fields of Study: Nursing, Pharmacy, Public Health. This course may be repeated 2 times. This course is repeatable for a total of 2 hours.

PHPR 2611 - Professional Leadership Development

1 Credit

Professional Leadership Development is an elective course designed for pharmacy students who have completed one or two years of study in the Pharmacy College. The goal of the course is to help students in developing their leadership skills for preparation in future leadership roles in the profession. Prerequisite(s): PHPR 1021 or PHPR 103. Must be enrolled in one of the following Colleges: Pharmacy.

PHPR 3011 - The Profession of Pharmacy 5

2 Credits

Continues professional development, understanding, and reinforcement of pharmacy services and patient care delivery. The functional practice of pharmacy, including product (medication and information) distribution systems and evaluation of their quality and impact on patient care. Offered fall semester. Prerequisite(s): PHPR 2021. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 2 hours. Course Attributes: Critical and Creative Thinking.

PHPR 3021 - Professional Pharmacy Skills 1

3 Credits

This course represents a continuation of information provided in the Profession of Pharmacy (PoP) sequence. The course is designed to build upon professional development and understanding of pharmacy services, pharmaceutical care, and patient care delivery. Offered Spring semester. Prerequisite(s): PHPR 3011 and PHPR 3311. Must be enrolled in one of the following Colleges: Pharmacy. Must be enrolled in one of the following Fields of Study: Pharmacy. Must have one of the following Student Attributes: P3. This course may be repeated 2 times. This course is repeatable for a total of 3 hours. Course Attributes: Diversity-Human Interaction, Effective Communication Non-Writing.

PHPR 3311 - Self-care and the Pharmacist

3 Credits

Students gain skills to counsel patients who desire to conduct self-medication or self-therapy with non-prescription drug products. Offered fall semester. Prerequisite(s): PHPR 2021. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 3 hours. Course Attributes: Integration Across Disciplines.

PHPR 3401 - Women's Health Issues

1 Credit

This course introduces students to timely and important topics in women's health through a discussion-based approach guided by the course instructor. This course broadly covers a number of issues that impact women's health and affect the provision of healthcare to women in the U.S. and internationally, both from a clinical health and public health perspective. Students will be presented with a holistic view of women's health across the lifespan and will also be exposed to social and economic issues that impact women's health. Offered fall semester. Prerequisite(s): PHPR 1011 or PHPR 103. Must have one of the following Student Attributes: Pharmacy Second, Third, Fourth, or Fifth Year.

PHPR 3411 - Introduction to Natural Product Therapeutics

2 Credits

The course will help pharmacy students understand the use of therapeutics and natural products in modern medical practice and the role of the pharmacist within the practice. Offered spring semester. Must have one of the following Student Attributes: PHARMACY FOURTH OR FIFTH YEAR.

PHPR 3431 - Chemical Dependency

2 Credits

This course educates the pharmacy student about the disease of chemical dependency, the risks to pharmacists, consequences of use (personal and professional) and treatment methods and recovery. Offered fall semester. Must have one of the following Student Attributes: Pharmacy Second, Third, Fourth, or Fifth Year.

PHPR 3451 - Pharmacy Ownership

2 Credits

A step wise approach to establishing a pharmacist owned business. Starting with a review of the various business opportunities available for someone with a pharmacy degree, the course begins with the philosophy of business ownership and then leads the student through the steps needed to open a business. Market and site analysis, business forms, lease review, developing a business plan, understanding financial considerations, capital needs, acquiring startup monies, layout, human resources and promotional strategy are all reviewed. Offered spring semester. Prerequisite(s): PHPR 2021 or PHPR 203.

PHPR 4011 - Professional Pharmacy Skills 2**4 Credits**

Continuation of PHPR 3021. Offered fall semester. Prerequisite(s): PHPR 3021 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 3 times. This course is repeatable for a total of 4 hours.

PHPR 4411 - Cardiovascular Module**6 Credits**

An integrated approach to organ system disorders including the rational use of pharmacological agents used to treat them. Comprehensive discussion of drug design and structure activity relationships is integrated with the therapeutic and toxicologic actions of the drugs. Basic principles of the pharmacokinetic and pharmacodynamic properties of the drugs used in these disorders are presented and discussed. Offered spring semester. Prerequisite(s): PHBS 4321 and PHBS 4431 and PHPR 4011. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 6 hours.

PHPR 4421 - Chronic and Ambulatory Medicine Module**6 Credits**

Continuation of PHPR 4411. An integrated approach to organ system disorders including the rational use of pharmacological agents used to treat them. Comprehensive discussion of drug design and structure activity relationships is integrated with the therapeutic and toxicologic actions of the drugs. Basic principles of the pharmacokinetic and pharmacodynamic properties of the drugs used in these disorders are presented and discussed. Offered spring semester. Prerequisite(s): PHBS 4321 and PHBS 4431 and PHPR 4011. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 6 hours.

PHPR 5431 - Infectious Disease Module**5.5 Credits**

Continuation of PHPR 4421. An integrated approach to organ system disorders including the rational use of pharmacological agents used to treat them. Comprehensive discussion of drug design and structure activity relationships is integrated with the therapeutic and toxicologic actions of the drugs. Basic principles of the pharmacokinetic and pharmacodynamic properties of the drugs used in these disorders are presented and discussed. Offered fall semester. Prerequisite(s): PHPR 4411 and PHPR 4421. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 5.5 hours.

PHPR 5441 - Advanced Endocrine Module**3.5 Credits**

Continuation of PHPR 5431. An integrated approach to organ system disorders including the rational use of pharmacological agents used to treat them. Comprehensive discussion of drug design and structure activity relationships is integrated with the therapeutic and toxicologic actions of the drugs. Basic principles of the pharmacokinetic and pharmacodynamic properties of the drugs used in these disorders are presented and discussed. Offered fall semester. Prerequisite(s): PHPR 4411 and PHPR 4421. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 3.5 hours.

PHPR 5451 - Central Nervous System Module**5.5 Credits**

Continuation of PHPR 5441. An integrated approach to organ system disorders including the rational use of pharmacological agents used to treat them. Comprehensive discussion of drug design and structure activity relationships is integrated with the therapeutic and toxicologic actions of the drugs. Basic principles of the pharmacokinetic and pharmacodynamic properties of the drugs used in these disorders are presented and discussed. Offered fall semester. Prerequisite(s): PHPR 4411 and PHPR 4421. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 5.5 hours.

PHPR 5461 - Capstone in Pharmacy Practice**6 Credits**

The module requires the student to utilize accumulated pharmaceutical education and apply learned principles to organize and synthesize relevant information to describe, optimize and critique drug therapy in unique and classic diseases. Information will be presented in written and oral, formal and informal formats. Activities include case presentations, reviews of 'the literature,' literature critiques and other formats that allow demonstration of proficiency in effective, safe, and 'patient specific' application of drug therapy. Students work in small groups when possible to demonstrate interpersonal skills. Culminates with an encompassing final exam which is a prerequisite for clinical rotations. Offered spring semester. Prerequisite(s): PHPR 5431 and PHPR 5441 and PHPR 5451 and PHPR 5471. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 6 hours.

PHPR 5471 - Oncology Module**3.5 Credits**

Continuation of PHPR 5451. An integrated approach to organ system disorders including the rational use of pharmacological agents used to treat them. Comprehensive discussion of drug design and structure activity relationships is integrated with the therapeutic and toxicologic actions of the drugs. Basic principles of the pharmacokinetic and pharmacodynamic properties of the drugs used in these disorders are presented and discussed. Offered fall semester. Prerequisite(s): PHPR 4411 and PHPR 4421. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 3.5 hours.

PHPR 5501 - Pharmacy Administration Module**6 Credits**

An interdisciplinary approach to the practice of pharmacy as it fits into the contemporary health-care system and the business environment. Includes theoretical concepts as well as practical methodology techniques to assess the external and internal economic, social, philosophical, ethical, and legal influences on the practice. Planning, evaluating, and decision making through financial report analysis and case study is stressed. Offered spring semester. Prerequisite(s): PHPR 5431 and PHPR 5441 and PHPR 5451 and PHPR 5471. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 6 hours.

PHPR 5531 - Special Populations**3 Credits**

The course will educate students in the clinical guidelines and therapeutics of special patient populations including pediatrics, geriatrics, pregnancy and lactation, and others. Offered spring semester. Prerequisite(s): PHPR 5431 and PHPR 5441 and PHPR 5451 and PHPR 5471. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 3 hours.

PHPR 5551 - Emergency Medicine**2 Credits Grading mode is S/U**

An overview of unscheduled medical appointments and emergencies. Offered spring semester. Must have one of the following Student Attributes: Pharmacy Fifth year.

PHPR 5561 - Palliative Care**2 Credits**

Discuss and understand related pathophysiology changes and apply related therapeutics to various chronic disease states that warrant palliation of related symptoms. The role of the interdisciplinary team including pharmacists, nurses, physicians, chaplains and related social support will be explored as a pivotal point for successful palliative care. Pharmacokinetic and pharmacodynamic implications of geriatric patients will be discussed in relation to therapeutic selection and various disease progression models. Offered spring semester. Must have one of the following Student Attributes: Pharmacy Fifth year.

PHPR 5581 - Advanced Compounding**2 Credits**

A laboratory based course designed to expand on the basic compounding technique and develop problem solving skills pertaining to pharmaceutical compounding dilemmas. Must be enrolled in one of the following Classifications: Pharmacy - Fifth Year.

PHPR 5591 - Career Planning**1 Credit**

This course offers an overview of information to prepare a student pharmacist to take necessary steps to achieve the desired pharmacy career. The course will be a combination of class discussions, guest speakers, in-class workshops, readings and assignments. Prerequisite(s): PHPR 5431 and PHPR 5441 and PHPR 5451 and PHPR 5471.

PHPR 5941 - Seminar in Pharmacy Practice**1 to 3 Credits**

Can be repeated as the topic varies. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Pharmacy. This course is repeatable for a total of 3 hours.

PHPR 5971 - Independent Study-Pharmacy Practice**1 to 16 Credits**

Can be repeated as the topic varies. Offered fall and spring semesters. Must be enrolled in one of the following Colleges: Pharmacy. This course is repeatable for a total of 16 hours.

PHPR 6501 - Advanced Pharmacy Practice Experience - 1**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.

PHPR 6502 - Advanced Pharmacy Practice Experience - 2**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.

PHPR 6503 - Advanced Pharmacy Practice Experience - 3**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.

PHPR 6504 - Advanced Pharmacy Practice Experience - 4**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.

PHPR 6505 - Advanced Pharmacy Practice Experience - 5**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.

PHPR 6506 - Advanced Pharmacy Practice Experience - 6**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.

PHPR 6507 - Advanced Pharmacy Practice Experience - 7**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.

PHPR 6508 - Advanced Pharmacy Practice Experience - 8**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.

PHPR 6509 - Advanced Pharmacy Practice Experience - 9**4 Credits**

Full-time experiential program emphasizing delivery of pharmaceutical care in primary, secondary and tertiary patient care settings, as well as a means of integrating facts and principles received from antecedent courses. The process will occur in both institutional and ambulatory settings. At each practice setting, the student is expected to become a functioning component of the ongoing pharmaceutical care services through faculty instruction, self-learning, and by observing the modeling of attendant faculty members. Completion of all BSPC and PHPR coursework with a C or better is required. Prerequisite(s): PHPR 5461 Minimum Grade of C and PHPR 5501 Minimum Grade of C and PHPR 5531 Minimum Grade of C. Must be enrolled in one of the following Colleges: Pharmacy. This course may be repeated 2 times. This course is repeatable for a total of 4 hours.



THE CLAUDE W. PETTIT COLLEGE OF
Law

THE CLAUDE W. PETTIT COLLEGE OF Law

Richard Bales, *Dean*

Professors Brant, Clarke, Crago, Frohnen, Gerber, Hill, O'Melinn, Raack, Veltri, Ward (*Associate Dean*); **Associate Professor** Kamatali, Keller, Newell, Sabol; **Assistant Professors** Anderson, Bartlett, DellAntonio, Hall, Mittendorf, Powell; **Taggart Library: Professor** Armstrong; **Associate Professors** Siebesma

Founded in 1885, the College of Law of Ohio Northern University is accredited by the American Bar Association (1948) and is a member of the Association of American Law Schools (1965).

Ohio Northern maintains an intellectually challenging curriculum in which each student refines the analytical, interpersonal and communication skills essential for success. Students are prepared for the legal profession by nationally recognized scholars who are committed to producing extremely skilled graduates who can compete in today's challenging legal world.

The Fred L. Carhart Memorial Program in Legal Ethics was established in 2007. The program brings eminent scholars, jurists, and lawyers to Ohio Northern to actively engage in lectures, seminars and panel discussions for the benefit of our students, the college and university communities, and the public, as well as the bench and bar. The Carhart program will fund lectures and symposia in alternating years. The first lecture was held in 2007-2008.

Ella A. and Ernest H. Fisher Chair in Law. Established in 1984 from the estate of Ella A. and Ernest H. Fisher.

Dr. Steven W. and Helen E. Kormendy Law Lecture Fund. Established in 1987 by Mrs. Helen Kormendy and family in memory of her husband, Dr. Steven W. Kormendy, JD '28, LL.D. '86. The income from the fund is used to bring a prominent legal figure to the campus to address matters of law in a public forum and in class settings.

Laurence N. Woodworth Memorial Lecture in Federal Tax Law and Policy. Laurence Neal Woodworth, a 1940 graduate, devoted his entire professional career to the formulation and implementation of tax law and policy at the highest level. The University and the College of Law established the lectureship in 1995 in his honor as a preeminent forum for the articulation of new ideas and new directions in tax policy in the United States. The lecture is given annually by a nationally prominent figure in the tax field.

For more detailed information about the academic programs in the College of Law, consult the College of Law catalog. Copies are available online or can be requested from the Law Admissions Office.

Mission Statement

The mission of the College of Law is to provide an excellent legal education emphasizing service to a diverse community and profession.

Faculty and Facilities

The College of Law is located in Tilton Hall, built in 1973 and expanded and remodeled in 1983 and again in 1998. The law college contains faculty and student activity offices, two courtrooms, two student lounges, and the library. Wireless connectivity is available throughout the entire law college building. The Taggart Law Library houses more than 430,000 volumes in both hard copy and microform and offers computerized legal research services including LEXIS, WESTLAW, and a growing number of Internet subscription services. The library is a federal depository and contains a significant collection of government-related materials. Students are taught to use library materials and computers in their first year, and individualized instruction is available thereafter. A free, statewide, resource-sharing network (OhioLINK) provides faculty and students with direct online borrowing privileges at more than 80 college and university libraries. The library offers ample study carrels and tables and a computer lab. Additional network and power connections are available for notebook computers in the library and at several other locations in the law build-

ing. The law college has attracted an outstanding faculty. As publishing scholars and experienced practitioners, the faculty contributes both professionally and personally to the student body and to the enhancement of the quality of student life. The Alumni Moot Court Room was renovated in 2011 to contain the latest in courtroom technology. The David C. Crago Rare Book and Special Collections Room was added to the Taggart Law Library in 2012. The Office of Law Admissions (2014), recently renovated in honor of a donation from alumnus Nick Amato, JD '88, contains a new waiting area and coffee bar for visitors, updated offices and storage spaces, and a counseling room for prospective students.

Program of Instruction

The basic program of study leads to the awarding of the Juris Doctor (J.D.) degree. This program requires three years of full-time study. Each academic year consists of two semesters and a January term. There are no part-time or evening programs.

The core curriculum of the College of Law provides a solid foundation in all traditional legal subjects from a national perspective. A wide range of electives is available to the student to round out the program of study and develop an individual focus, including courses from the following areas: bankruptcy, commercial and business law, taxation, international and comparative law, environmental law, government regulatory law, employer-employee relationship law, civil liability law, and property law.

Well-established clinical and legal extern programs and a judicial externship also play an important role in the curriculum. The College of Law offers a program of clinical legal studies and extern placement for academic credit that incorporates both classroom instruction and actual law office and courtroom experience.

Each semester those students receiving a minimum grade point average of 3.50 are named to the Dean's List of the College of Law. They are recognized with a certificate at the annual awards ceremony.

LL.M. in Democratic Governance and Rule of Law and Concurrent J.D./LL.M. Degrees

Lawyers from transitional countries and emerging democracies can pursue a Master of Laws in a one academic year program in the College of Law. The program is designed to train lawyers from the public sector in skills that will assist them in building stable democratic institutions in their home countries and develop systems that will support the rule of law in a market economy. The two-semester, twenty-four credit program is more fully described in materials available from the College of Law. The College of Law also offers a concurrent J.D./LL.M. program that can be completed within three years.

Concurrent J.D./M.P.P.A. Degree Program

Students with an interest in taxation can earn both their law degree and a masters of professional practice in accounting through a concurrent degree program offered by the College of Law and the Dicke College of Business Administration. Students admitted to the program can earn both degrees within three academic years.

Concurrent degree students begin their studies with the standard first year curriculum of the College of Law. In the summer following their first year, students will take federal income taxation and an elective course. Following a second academic year of specialized courses and electives, students will be placed in a summer externship for credit that will offer a field experience in tax accounting. The students will then complete a third year of study and earn both the J.D. and M.P.P.A. in the spring.

Student Activities

Many student organizations complement the academic life of the law college and provide an opportunity for further professional and personal development.

Among those organizations are the Agricultural Law, Black Law Students Association (BLSA), Christian Legal Society, Environmental Law Society, Federalist Society, Icelandic Legal Exchange Program, International Justice Mission, International Law Society, LAMBDA Law Students' Association, Legal Association of Women, ONU Law Students for Reproductive Justice, Public Interest Law Association, Sports Law Society, Street Law Society, Student Animal Defense Fund, Student Bar Association (SBA) and Veterans Association. The law college also offers Phi Alpha Delta, a legal fraternity.

The William Howard Taft Inn of the American Inns of Court was established in the spring of 1992 at Ohio Northern University. Members include judges, senior attorneys, young lawyers, professors and a group of ten rising second- and third-year law students. The Inn seeks to encourage better trial practice; foster civility amongst practitioners of our craft; and to aid in the professionalism of the advocacy program.

The law college's strong Moot Court program sends teams to national and international competitions. In addition, three internal competitions are conducted. These competitions offer students ample opportunity to hone their research, writing and speaking skills.

The Ohio Northern University Law Review, a highly respected and award-winning law journal, is edited and published by law students. Published three times per year, the Law Review consists of leading articles on current legal topics, student comments on cases and legislation, and selected symposia presentations on varied legal topics.

Student Body

The student body is comprised of men and women who represent a wide range of ages, cultures, interests, abilities, and accomplishments. Nearly 137 undergraduate institutions are represented by the law college's enrollment of approximately 201 students.

Admissions Process

The College of Law endeavors to select a first-year class which reflects the geographical and cultural diversity of the United States and in which women, persons with disabilities, and minorities are fairly represented. Applicants must have a bachelor's degree from an accredited college or university. First-year students are admitted for the fall or summer semester only, but transfer students may enter during either spring or fall semesters. Under some circumstances part-time programs in compliance with the regulations of the American Bar Association may be approved by the Associate Dean for Academic Affairs.

Registration with the Law School Data Assembly Service (LSDAS) is required to provide the Admissions Committee with an official copy of the applicant's score report, an analysis of the undergraduate transcripts(s), and a copy of the applicant's LSAT writing sample.

Although there is no deadline for applying to the College of Law, students are encouraged to apply as early as possible to avail themselves of the most consideration for admission and financial aid awards. The Admissions Committee will review files beginning in late fall and will make decisions until the entering class is filled. Two seat deposits are required for accepted students by April 1 and mid-June.

While LSAT score and undergraduate academic record are given considerable weight in the admissions process, other factors may be considered by the committee. These factors may include the applicant's intellectual growth as exhibited by the completion of other advanced degrees, work experience that has increased the applicant's analytical and communication skills, and ethnic, racial and /or socioeconomic barriers that had to be overcome by the applicant.

Financial Aid

Scholarships, grants and loans are awarded by the College of Law to qualified applicants. The **Legal Scholar Program** recognizes students who have excelled academically. Awards range from \$3,000 to \$24,000. Students who meet these criteria will be automatically notified of their awards, and no separate application is required. Scholarships are renewable in the second and third years of law school as long as the student meets the grade point average requirement stated in the acceptance form. Additional scholarship awards, which are also renewable, are made to students who distinguish themselves academically during their first year.

Students will be awarded grants subject to funding availability. Generally, grants are renewable if the student's financial statement, which is filed annually, continues to show need.

Financial aid is also made available in the form of federally-insured student loans and student loans from private sources. A FAFSA application is required for student loans. Applications and additional information about loan programs may be obtained from the Ohio Northern University Financial Aid Office.

LAW COLLEGE CALENDAR 2015-16

Fall Semester 2015

August

20	Law students arrive; check-in residence halls
20-21	New law student orientation
24	Last day for payment of fees, Law classes begin
24-28	Late registration
28	Last day to add a class or section
31	Beginning of "W" period for withdrawals

September

7	Labor Day - Classes recess
8	Classes resume, Beginning of "W" period for withdrawals

October

10-13	Classes recess
14	Classes resume
23	Last day to withdraw
26-30	Registration for January Term/Spring

November

13	Last day to remove "incomplete"
18	Law classes end
19-27	Thanksgiving recess
28-30	Reading days

December

1-12	Law finals
12-Jan. 3	Christmas break
12	Fall Graduation

January Term 2016

January

4	Law students arrive; check in, Classes begin
5	Last day to add a class or section
6	Beginning of "W" period for withdrawals
12	Last day to withdraw
18	Martin Luther King (class recess)
20	Last day of classes
21-22	Reading days
25-26	Law Finals

Spring Semester 2016

29	Last day for payment of fees, Law Spring Semester begins
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February

4	Last day to add a class or section
4	Late Registration
5	Beginning of "W" period for withdrawals
29-Mar. 4	Spring Recess

March

5	Classes resume
23-27	Summer/Fall Registration
25-28	Easter Recess
29	Classes resume

April

8	Last day to withdraw
29	Last day to remove "incomplete," Classes End

May

2-14	Law finals
15	Commencement (Sun.)

Summer Session 2016

Classes:	May 31-July 21
Reading days:	July 22-24
Final exams:	July 25-27

TUITION, FEES, AND OTHER CHARGES 2015-16

College of Law

Students enrolled and attending classes for the 2015-16 academic year

Tuition & General Fee L-1 Per Semester

•Full-time student	\$11,755
•Part-time student (less than 12 hrs.) (per hour)	\$980
•Academic overload fee (per hour)	\$735
•January Term (per hour)	\$980

Tuition & General Fee L-2 & L-3 Per Semester

•Full-time student	\$12,735
•Part-time student (less than 12 hrs.) (per hour)	\$1,060
•Academic overload fee (per hour)	\$795
•January Term (per hour)	\$980

Tuition & General Fee LLM Per Semester

•Full-time student	\$15,480
•Part-time student	\$1,290
•Academic overload fee (per hour)	\$970
•January Term (per hour)	\$1,290

Summer Session 2016

1. College Fees, per credit hour

College of Law	\$980
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2. Apartment Rental (Summer)

Double	\$415 per month
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Technology Fee Per Semester

•Full-time student	\$280
•Part-time student	\$115

Room

•Campus Apartments (double occupancy)	\$4,200
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Additional funds are needed for books, supplies, and incidentals. A minimum of \$500 per term should be budgeted for these purposes. Books and supplies are sold at the ONU Bookstore on a cash basis or by credit card.

Tuition and fees cover use of the library, laboratories, Health Center, Sports Center, McIntosh Center, cultural activities, co-curricular programs, and admission to athletic events and most other events on campus, the student newspaper, literary magazine, and yearbook if full-time during the two semesters of the academic year.

PAYMENT PLANS

The university makes available to parents and students a variety of plans which can be used to make fee payments. Please contact the controller's office for more information on these plans.

Regular Billing Schedule For students selecting courses during the advance registration period, the fall semester billing will be sent through the TouchNet Ebill System. Students will receive an email at their ONU email address when a bill is available for viewing. Any arrangements for loans or financial aid should be made well in advance of each semester so that all fees are paid by the date they are due.

For students registering at the beginning of the semester, full payment is required as a part of the registration process.

Visa/MasterCard/Discover/American Express Payment of fees may be made by MasterCard, or Discover. A convenience fee of 2.75% will apply.

Educational loans are available through a variety of loan firms and financial institutions. Many offer monthly payments which can be spread over a variety of repayment times. Information regarding these loans may be obtained from the financial aid office.

DUE DATES FOR FEE PAYMENT FOR 2015-16

Fall Semester	August 24, 2015
Spring Semester	January 29, 2016

OTHER CHARGES

1. **Auditing Fee**, per semester hour (when permitted) \$15.00

2. Applied Music Lessons

For music minors and non-music majors-for each instrument \$325.00

3. Late Registration Fee

The late registration fee is assessed if course registration is not completed at the established time each semester or if re-registration is required..... \$110.00

4. Late Payment Fee

If fees are not paid in full when due, a \$50.00 charge is assessed. If fees are then not paid by the first day of class, a charge of 1 1/2% of the unpaid balance will be assessed. Thereafter, interest at 1 1/2% per month (18% annual rate) will be charged on any unpaid account balance at the end of each month.

5. Student Bar Dues (full-time law students only)

per semester..... \$20.00

6. Law Review Fee (all law students)

fall semester only..... \$20.00

7. Application Fee, non-refundable, payable with application for admission

..... \$40.00

8. Advance Deposit

Fall Matriculants:

Upon receiving an offer of admission to Ohio Northern Law School, an advance deposit of \$400.00 will be required by April 15.

A second deposit of \$200.00 is required by June 15. No portion of the first or second deposit is refundable. Both deposits are credited to fall tuition.

Summer Matriculants:

Students offered admission to the Summer Starter Program will be required to submit a deposit of \$500.00 by April 15.

Summer or Fall matriculants admitted after a due date will be required a partial or full payment within 7-14 days of the admission date.

9. Transcript Fee

- Transcripts may be ordered via Self-Service Banner from National Student Clearing house (NSC), a non-profit organization serving the higher education community.
- Transcript fee is \$4 plus NSC service fee(s).
- Transcripts ordered from NSC are processed same or next day if electronic delivery is chosen, and two to five days business days if paper delivery is chosen.
- Special handling will be granted upon request, at the registrar's office, with prepayment of the appropriate fee.

10. **Lost/stolen/damaged ID Card Fee** \$25.00

11. **Payment Plan Fee**..... \$25.00

12. **Returned Check Fee**..... \$25.00

13 Residence Halls

- a. Improper check-out \$100.00
- b. Re-pin/new keys \$100.00
- c. Door knob replacement \$300.00

14. Motor Vehicles

On-Campus Parking Permit

Full Year \$65.00
Per Semester..... \$40.00

Scholarships and Loan Funds

General Scholarships

The scholarships and loans listed below are made possible through gifts to the university in the names of generous donors who wish to assist students. This list is intended to recognize their generosity. Special applications for a specific scholarship or loan are not required. (If a student is eligible for one of these named scholarships or loans the Student Financial Aid Office will place his/her name on the list of possible recipients for such awards.)

- The David and Catherine Kegerreis Albright Scholarship is an unrestricted scholarship.

- The American Trim Scholarship was established by American Trim, formally the Superior Metal Products Company of Lima, Ohio, for a qualified student(s) in the College of Engineering and the College of Business.

- The Andrews Student Aid Fund was established by Mrs. Mabel Andrews Beachler of Celina, Ohio in honor of her brothers and sisters who attended Ohio Northern University. Income from the fund shall each year be awarded to a worthy student with financial need. Members of the family who attended Ohio Northern included Charles, Ralph, James, Mabel, Louise and Alice Andrews.

- The Gertrude Andrews Scholarship, established through the will of Mrs. Gertrude Andrews, is awarded to students with demonstrated financial need.

- The Clyde and Frances Augsburgers Scholarship Fund was established by Robert R. Augsburgers and his wife, Jean Ann, as a memorial to his mother, Frances Russell Augsburgers, AA 1888, and his father, Clyde Augsburgers, BSCE 1921, for an arts and/or engineering student selected in accordance with university policy.

- The Woodrow W. Bailey Scholarship was established by Mary Banfield Bailey to honor her husband, Woodrow "Woody" Bailey, BSEd 1937. Mr. Bailey was an excellent student athlete and was inducted into the ONU Hall of Fame in 1996. The scholarship assists an academically worthy student athlete.

- The Dr. Byron Evans Baker Scholarship is presented to a qualified student with recognized financial need.

- The Kendall and Toby Baker Scholarship was established by the University Trustees in honor of Ken and Toby, BSFA 2006, upon their retirement from the University. Dr. Baker served as President of the University from 1999-2011.

- The John Banyas Scholarship was established by Mr. Banyas to assist student(s) from Belmont County in Ohio with preference being given to Martins Ferry High School graduates.

- The Richard Wellington Barnes, Class of 1892, Scholarship was established by a trust from his daughter, Florence Barnes Hartman, to assist general university students.

- The Barnes & Noble Textbook Scholarship was established through a gift from Barnes & Noble Bookstore to help students purchase textbooks. The fund is to honor the leadership and service of Dr. Kendall Baker, past president of Ohio Northern University 1999-2011. The award is to be awarded at the discretion of the University.

- The Steiner F. and Ollie M. Bauman and Roy H. and Ruth G. Lambert Loan Fund was established through a bequest from Mrs. Lambert, BSEd 1936 as a memorial to her parents, The Bauman's, as well as, for she and her husband, Roy H. Lambert, JD 1937. The fund shall be made available as loans, which are to be repaid, and the fund shall be a revolving, so as to provide the maximum benefit for worthy students.

- The Olga "Mom" Bentley Leadership Scholarship was established by members of the Sigma Phi Epsilon fraternity in memory of their house mother, Olga Bentley. The annual award will be for junior and senior men at Ohio Northern University who have proven themselves to be strong campus leaders and who are committed to the service of others.

Schedule of Fines

Improper parking	\$15.00
Driving or parking on grass.....	\$30.00
Driving on sidewalks.....	\$30.00
Reckless operation of a motor vehicle.....	\$35.00
Parking without parking permit.....	\$65.00
Stop sign.....	\$15.00
Parking in fire lanes.....	\$35.00
Falsification of information.....	\$30.00
Parking longer than posted time.....	\$15.00
Parking in restricted area.....	\$25.00
Parking in handicapped space (not an appealable fine)	\$50.00
30-day Parking Ticket Non-Payment Late Fee (per ticket).....	\$5.00

Motor vehicle regulations are designed to protect the safety and welfare of the campus community and promote good order. Violations are issued by security officers. Cited violators may appeal to an appeals committee within three working days of the violation.

Charges for Damages to University Property

Students will be billed for any damages to university equipment or property. The charges include the estimated cost of replacement parts or materials, labor for repair or replacements, and overhead expenses associated with the clean-up, repair, or replacement.

Payment of University Accounts

Students should pay all financial obligations to the university promptly. Registration for a succeeding semester and issuance of a diploma or transcript are dependent upon the student's paying all financial obligations to the university.

Student Identification Cards

The first student ID card is issued to registered students without charge. Replacement will be charged for lost, stolen or damaged ID cards. The ID card allows free admission to athletic events, reduced admission to theatre productions, and the artist series. This card is also required for library checkout, meal contract registration, and resale of textbooks at the university bookstore. ID cards are also required for some labs and entrance to on-campus housing.

Refunds

Tuition and General Fee If a student withdraws from the university or is suspended for disciplinary reasons, refunds of tuition will be made on the basis shown below.

Students attending Ohio Northern University are entitled to a pro-rata refund calculation through the 60% point of the semester. Financial aid adjustments will be calculated based upon mandated federal refund calculations. A 100% refund is granted on or before the first day of class each semester. After that, the percentage is based on the number of days in attendance for the semester. There is no refund after the first 60% of the semester.

Also, keep in mind, students who drop from full-time to less than full-time during the first 60% of the semester will have adjustments made to their financial aid and tuition.

Housing

The university makes available well-maintained living facilities at a moderate cost for both male and female students. Off-campus apartments, rooms, and houses are available in the village of Ada. The university publishes lists of off-campus housing throughout the year.

Career Services

The Law Career Services Office provides counseling in the job application and interviewing process, as well as serving as a career opportunity and information resource for students and alumni. The director coordinates workshops, speakers, and on-campus recruitment. As a member of the Ohio Law Placement Consortium and the National Association of Law Placement, the College of Law also participates in the placement activities of the OLPC and NALP.

Correspondence

Inquiries should be directed to Law Admissions, Claude W. Pettit College of Law, Ohio Northern University, Ada, Ohio 45810. Phone 419/772-2211 or 1-877-452-9668.

- The Clark O. and Dorothy B. Biddle Endowed Scholarship was established by the estate of Dorothy B. Biddle for deserving Ohio Northern students.
- The E.J. Brookhart Scholarship, established by Mrs. Dora M. Brookhart in memory of her husband, a graduate in 1903 and a trustee of ONU, is provided to students with recognized financial need.
- The Brubaker Endowed Student Aid Fund was established by the estate of Ralph E. Brubaker, in memory of his wife, Thelma Hughey Brubaker, and is restricted to students from Defiance, Fulton, Henry, Lucas, Putnam or Wood Counties. The Brubakers were active members of the United Methodist Church.
- The Clair E. and Rosemary Butturff Scholarship was established by Clair E., Hon. DBA 1995, and his wife, Rosemary Butturff from Lima, Ohio. The scholarship recipients will be limited to full time sophomore and above students attending Ohio Northern University and who a.) live in Allen and contiguous counties in Ohio, b.) who are employed, c.) have an average 2.50 GPA on a 4 point grading scale, d.) are deemed worthy of financial assistance as judged by appropriate college officials, and e.) practice a religion of their choice aspiring to high moral and spiritual standards. The maximum amount available to any one student shall not exceed 12.5% of his or her annual cost of tuition.
- The John S. Canterbury Memorial Scholarship was established by Pauline Canterbury in honor of her husband. The scholarship is awarded to students with financial need.
- The Kathryn Reese Canterbury Memorial Scholarship, established by Dr. John S. Canterbury in memory of his wife, is presented to students with recognized financial need and preferably a graduate of Ada High School, Ada, Ohio.
- The Sally Jo Carlton Scholarship was established by Mr. and Mrs. William H. Carlton of Lima in memory of their daughter, Sally Jo, BA 1968. Scholarships are to be made to qualified female undergraduate students.
- The Robert and LaVelva Chandler Scholarship was established through the generosity of Mrs. LaVelva Chandler to assist academically worthy students with financial need. To be eligible for the scholarship, the recipient must have graduated from Ada High School.
- The Paul Chenoweth Scholarship Fund was established through the will of Paul L. Chenoweth for students selected in accordance with university financial aid policy.
- The Raymond and Leola V. Clark Scholarship was established by a gift from Mr. Clark, BSCE 1927, of Willoughby, Ohio. Award to go to a qualified student(s) in any of the four undergraduate colleges.
- The Class of 1933 Scholarship Fund, established by members of the Class of 1933 during their 50th year reunion, is presented to qualified students with financial need.
- The Class of 1939 Scholarship was established by members of the Class of 1939 during their 50th reunion year.
- The Class of 1949 Reunion Scholarship was established by the members of this class during their 40th and 50th reunion years for a student with financial need.
- The Class of 1961 Scholarship was established in honor of the Class of 1961 35th reunion to help support a deserving, qualified student.
- The Class of 1990 Scholarship Fund was established by the senior class of 1990. Scholarship will rotate among all four undergraduate colleges with the Deans of the colleges making recommendations for the recipient who must be a senior or P5 status.
- The Class of 1991 Scholarship provides two annual scholarships to students in their final undergraduate year.
- The Class of 1992 Scholarship provides two annual scholarships to students in their final undergraduate year.
- The Class of 1993 Scholarship provides one annual scholarship to a student in his/her final undergraduate year.
- The Class of 1994 Scholarship provides two scholarships to students who are in their final undergraduate year. One merit-based and one need-based scholarship are awarded.
- The Clevenger Financial Aid Fund was established by Millard and Rowena O. Clevenger of Lima, Ohio. The award is to be made to any worthy, qualified student with financial need with preference given to students in Allen County.
- The Eugene S. and Catherine K. Coleman Fund was established through the estate of Eugene S., BSED 1944, and Catherine K. Coleman to provide scholarship support for student athletes. Gene was very grateful for his education and this scholarship is designed to help students who love sports and to make it possible for them to attend Ohio Northern University.
- The Columbia Gas of Ohio Scholarship was established by Columbia Gas Foundation and is awarded to a qualified undergraduate student who is a graduate of an Ohio high school.
- The Frank Cooper Financial Aid Fund, established by Mrs. Frances Brown Cooper as a memorial to her husband, Dr. Frank B. Cooper, is awarded to students from Hardin or adjacent counties.
- The Richard Cooper Memorial Award was established for an outstanding fraternity man.
- The Helen I. Craig Memorial Scholarship was established through a bequest of Helen I. Craig, BSEd 1966. Recipients are selected on the basis of university financial aid policy.
- The Thomas L. and Warren J. Cremean Scholarship was established by Dr. and Mrs. Ken Cooper.
- The William W. Crumling Scholarship Fund was established by the estate of Isabel M. Thomas in memory of her husband, who received a BSCE from ONU in 1925. Student awardees are selected according to institutional financial aid policy.
- The Helen Davis Memorial Scholarship was established by friends and family to honor the memory of Helen Davis who died in 2006 after a long battle with cancer. Since 1991, Helen had been the Box Office Manager and Arts Information Officer at Ohio Northern University's Freed Center for the Performing Arts.
- The Bertha Dicus Dickason and Oren Dickason, Sr. Scholarship Fund was established to provide for the continuing assistance of ONU from three generations of the Dickason family.
- The Dicke Financial Aid Fund was established by Mrs. Lula T. Dicke in memory of her husband, Oscar H. Dicke, BSEE 1911. It is awarded to students from New Bremen or Auglaize County who have financial need.
- The Louis P. Diefenbach Scholarship Fund is awarded to needy students from the Middletown area.
- The Dobbins Family Memorial Scholarship is given to worthy students with financial need from the College of Arts & Sciences and the College of Engineering. There is a long history between the Dobbins family and Ohio Northern University.
- The David F. Domizi Scholarship Fund, established through the will of David F. Domizi, supports a student with a demonstrated work ethic and strong academic background, or high academic potential, having financial need. Holder of the scholarship must maintain a 3.00 GPA. Scholarships from the fund shall be considered gifts to the recipient. However, it is the donor's hope that the recipient(s) will be successful and, in appreciation, will reimburse the fund if he or she is able to do so.
- The Helen (Lowrie) Downing and Roger L. Downing Scholarship Fund was provided under the will of Helen Marie Downing. This endowment shall be used for scholarships for students who are from Roundhead Township, Hardin County, Ohio, or Goshen Township, Auglaize County, Ohio, or if there are no students from these townships, then for students who are from the closest areas to these two townships.
- The Robert L. Dunipace and Grace B. Shantz Dunipace Scholarship was established by the estate of Marjorie Dunipace Shipley in memory of her parents, Robert L. and Grace B. Shantz Dunipace. Robert Dunipace was a former student of Ohio Northern. The award is to be made to any qualified student in the University.
- The Education Incentive Scholarship for Minority Students was established by faculty, alumni and friends of the University and is awarded to a qualified minority student.

- The Joe S. and Theresa B. Edwards, Jr. Fund was established by Joe and Theresa Edwards to augment the Serge F. Edwards Family Scholarship. Dr. Edwards was a trustee of the University from 1986-2007. The income from the fund will be added to the Serge F. Edwards Family Scholarship each year.
- The Serge F. Edwards Family Scholarship is awarded first to students from Leipsic, Ohio; second, students from Putnam County, Ohio; finally, students from the State of Ohio.
- The Eley - Crouse Student Aid Fund was presented by Mrs. Gladys Eley Crouse, AA 1924, BSEd 1955, in memory of her husband, Daniel H. Crouse. Available to students from Wyandot County who have financial need.
- The Elmer L. Faber Perpetual Scholarship was established through the generosity of Dr. Elmer L. Faber to assist academically worthy students at the University, with a preference for student athletes. Dr. Faber was an outstanding athlete as an undergraduate. He served the University in numerous ways as an alumnus, including as a member of the board of trustees and as president of the "N" Men's Association.
- The Reverend E. Eugene and Mary Jane Frazer Scholarship was instituted by the members of the Trinity United Methodist Church of Columbus, Ohio, in honor of their outstanding commitment to the church and community. The award is for pre-ministerial students enrolled at the University.
- The DeBow Freed Leadership Award. Given each year to the senior male and female chosen as the outstanding campus leader.
- The Ethel L. Frost Scholarship Fund was established by a bequest from Miss Frost.
- The G.A.R. Foundation Scholarship was established by the G.A.R. Foundation of Akron. Scholarships are awarded to qualified students from the state of Ohio.
- The Mozelle Coles Gamber and Ralph J. Gamber Scholarship was established in loving memory of Mozelle O. Coles (AA 1931) by her husband, Ralph J. Gamber (BSME 1931), and family. Students needing financial assistance are eligible for the annual award.
- The Gangemi-Krofft Financial Aid Award was established in 2003 in memory of Joseph J. Gangemi, the son of Francis and Charleen Gangemi of Findlay, Ohio. Joseph died in 2003 and would have been a freshman at Ohio Northern University in 2004. Francis Gangemi served the University from 1967-1995 as professor of physics and his wife, Charleen, received her BA degree in 1973. The award is for a science or engineering student.
- The Ernest R. Genovese Scholarship, established by Mr. (XLLB 1929) and Mrs. Ernest R. Genovese of Cuyahoga Falls, Ohio, is to be awarded to a qualified student in one of the four undergraduate colleges of the University.
- The Ginder Student Aid Fund, established by Clyde O. Ginder of Lima, Ohio, is to be awarded to a worthy student with financial need, with preference given to students from Allen County; also with special preference given to students from the First Baptist Church of Lima (Cable Road, Lima).
- The Grand Lodge of Free and Accepted Masons of Ohio Scholarship is awarded to Ohio residents with both academic ability and financial need.
- The Henry and Ruth Gray Scholarship was established through a bequest by Ruth Gray of Lyndhurst, Ohio. Henry Gray, her husband, had received an honorary degree in Public Service in 1975 from Ohio Northern University. The scholarship is available to students, including entering freshmen with preference for, but not restricted to students in the College of Pharmacy.
- The Frederick Earhart and Mildred Howard Guthery Scholarship was established by the estate of Robert B. Mautz, son-in-law of the Guthery family. Frederick Guthery was a well-known attorney and bank president in Marion, Ohio.
- The Helena R. Hall Scholarship was established by a bequest from Helena Ruth McCrea Hall, a friend of Ohio Northern University whose mother, Mrs. Trella McCrea, graduated from Ohio Northern in 1920. Income from the fund will be used to assist students, including entering freshmen, who are deemed worthy of financial assistance as judged by appropriate college officials, are United States citizens, and legal residents of the State of Ohio.
- The J. Jay Hampson Memorial Scholarship was established by an estate gift of J. Jay Hampson, BA 1973, JD 1976, ACit. 1996, LLD 1998, for students from Lancaster and/or Fairfield County, Ohio.
- The Jennette Cochrun Hapner Award is granted to students from Spencer-ville with financial need.
- The George and Faye Harris Scholarship was established by the late Mr. and Mrs. Harris of Polson, Montana, for qualified undergraduate students. Mr. Harris was a 1912 ONU graduate.
- The Robert Sanders Hegele and Nova Focht Hegele Scholarship Fund was established by a bequest in the will of Nova Irene (Focht) Hegele, BA 1913, in the name of herself and her husband, Robert Sanders Hegele, who also attended Ohio Northern, for deserving students who wish to attend Ohio Northern University.
- The Dr. George W. Herd Scholarship was established by the members of the First United Methodist Church, Lancaster, Ohio, for students selected by the church.
- The Alice and Robert H. Hilliard Scholarship was provided by the estate of Robert H. Hilliard, professor of history from 1947-74. It awards two annual scholarships for students having financial need. Deserving students from Hocking and Ross Counties of Ohio are given preference.
- The Robert E. Hillier Family Scholarship Fund was established by the Robert E. Hillier Family Foundation of Akron, Ohio--Colon C., Ruth E. and Pleadis A. Hillier, founders--to honor the memory of their father, Robert E. Hillier. It is awarded to high school students with outstanding academic records.
- The Harold C. Hodson Scholarship will assist deserving students in all of the undergraduate colleges who are eligible to receive the award.
- The Jonas Elias and Nellie Hosler Scholarship Fund was established through the generosity of J.E. (Bob) Hosler in honor of his parents, Nellie and Jonas Elias Hosler.
- The Merrill and Frances Insley Scholarship Fund, was established by Dr. Susan Insley, JD 1977, and her brother, Thomas Insley, to honor their father and mother, Merrill, BSpH 1936, DS 1970, and Frances Insley, AA 1933, BSEd 1935.
- The Mary G. Kennedy Memorial Fund was established through a bequest of Mary G. Kennedy, Hon. DH 1981. Mary was the granddaughter of Henry Solomon Lehr, founder of Ohio Northern University. The scholarship is for the benefit of deserving students attending Ohio Northern University.
- The Charles and Carla Kim Scholarship was established by Charles H., BSBA 1998, and Carla (Bender) Kim, BA 1997, of Boston, MA. The recipient of the scholarship will be a female student who is at least sophomore status. First preference, the student must be majoring in biology, chemistry, environmental sciences or any related natural sciences with a minor or demonstrated interest in business or finance. Second preference, the female student must be majoring in economics, finance, accounting or any type of the related business majors with a minor or demonstrated interest in mathematics or science.
- The Donald C. Kinsey Memorial Scholarship was established through the will of Mr. Kinsey, XBSME 1933, to provide scholarship assistance for deserving students at the University.
- The A.E. Knowlton Scholarship was established by Mr. Knowlton, whose construction company built several university buildings. Gift was made in memory of Mrs. F. Bringle McIntosh and is presented to worthy students.
- The Dr. John G. and Alice C. Koontz Scholarship Fund was established by the estate of John G. Koontz, DD 1965, to assist students preparing for the Christian ministry.
- The Donald E. LaRue Endowed Scholarship was established through a bequest of his daughter, Stella Alice LaRue, BSED 1952, of Ada, Ohio. The award will go to a student who participates in sports.
- The Herbert W. and Winifred Leicy Scholarship was established in memory of Dr. Leicy, BSpH 1934, DS 1971, trustee of the university, 1965-1999, and Mrs. Leicy by the family and friends for a qualified student from the Stuebenville area.
- The Nathan L. Lindabury and Family Scholarship was established by Nathan L., BSED 1940, his wife, Mary, and their children, Virginia L. Hoxie and Thomas L. Lindabury of Connecticut to provide financial assistance to qualified and worthy students.

- The Cleo R. and Dorothy Ludwig Scholarship was presented by Dr. Cleo Ludwig to students with high academic achievement and demonstrated financial need.
- The Lybarger Student Aid Fund, established by Sadie Lybarger, LA 1905, in memory of her family, longtime residents of Nevada, Ohio, for students with financial need.
- The Everett L. and Mary E. Maffett Scholarship is established as a general university scholarship to provide financial assistance for Native Americans to attend Ohio Northern University.
- The Joseph and Bruno Mallone Scholarship was established by Judge Joseph P. Mallone, BSED 1939, JD 1950, and friends, to honor the memory of his brother, Bruno A. Mallone, BSED 1942, HF 1980 and assist students from the Geneva High School system.
- The Jane Ann McBeth Matteson Scholarship Fund was established by a bequest from Ellen E. Matteson, BA 1924, for worthy and deserving students. Graduates of Upper Sandusky High School, Upper Sandusky, Ohio, receive first preference.
- The Maynard - Bulen Fund awards scholarships to worthy students with recognized financial need.
- The Donald L. Mays Scholarship was established through the generosity of Dr. Donald L. Mays, who served as Vice President for Development at Ohio Northern from 1987 through 1999. The scholarship provides aid to any student pursuing a career in public service.
- The Methodist Crusade Fund was established by the Methodists of Ohio in a campaign for higher education conducted in 1964-65 among Methodists throughout the state. Income from the fund is used each year for scholarships for Ohio United Methodists enrolled in one of Northern's four undergraduate colleges.
- The Samuel L. and Martha R. Meyer Scholarship, was established by Walter and Marian English in recognition of Dr. Meyer's twelve year tenure as president of Ohio Northern University. This award is made available to worthy students with high academic abilities and recognized financial need.
- The Oscar J., BA 1972, and Judith D. (Jacobs), BS 1970, Mifsud Emergency Financial Aid Fund was established to provide financial aid to students who, without assistance, would not be able to continue attending Ohio Northern University.
- The Dean Keith Miller Scholarship was established by former students and friends of Dean Miller in his honor.
- The Wilbur and Ethel Mitchell Scholarship Fund was established by a bequest from Ethel Mitchell and designated for worthy and deserving students from Hardin County high schools.
- The James L. and Dolores W. Moore Family Memorial Scholarship was established by Dolores Moore to provide financial assistance to undergraduate students in good standing who are graduates of a West Virginia high school.
- The Mortar Board Scholarship is provided by the Aurora Chapter at Ohio Northern University to a student selected by them.
- The National Lime and Stone Scholarship was established for worthy students with financial need.
- The National Methodist Scholarships are provided by The General Conference from Methodist Student Day annual offerings for students with established financial need.
- The Lou Ann Neubert Memorial Scholarship was presented by James and Louella Neubert in memory of their daughter, Lou Ann Neubert, alumna of Ohio Northern University.
- The Oborn Scholarship was established by George K. Oborn in memory of his wife, Pauline (Polly). It is presented to students with both superior academic abilities and financial need.
- The ONU License Plate Scholarship was established through the voluntary annual contribution fees from alumni and friends who participate in the State of Ohio collegiate license plate program. The fees provide general scholarship funds.
- The ONU Women's Endowed Scholarship Fund, established by the women of Ohio Northern University community, awards five equal need-based scholarships each year to one female student in each of the five colleges.
- The Ohio Northern University Secretarial Association Scholarship is given to a deserving student.
- The PNC Bank Scholarship was established through the generosity of the PNC Bank of Ohio to assist worthy students at the University to receive a quality education. A preference is given to students from southwest Ohio, as well as locations of PNC Bank of Ohio operations.
- The Lucille Palmer Scholarship was established as a general university scholarship, with preference given to students from Williams and adjoining counties and Logan County, but not limited to these students.
- The Pepsi-Cola Scholarship was established by the Pepsi-Cola Bottling Company to assist deserving students.
- The Harlan D. and Sara G. Pickett Memorial Scholarship was established through the Pickett estate for students from the city of Marion and Marion County.
- The Ezra and Mary Place Scholarship is awarded to graduates of Elida, Lima, Perry or Shawnee High Schools.
- The Raymond I. and Ruth C. Gallant Potter Scholarship was established by Mr. Raymond Potter and his wife, Mrs. Ruth Gallant Potter, in remembrance of their undergraduate years at ONU.
- The Avery and Elizabeth Powell Scholarship was established by Dr. Avery, BA 1924, and Mrs. Powell of Tiffin. Award is to go to qualified undergraduate students.
- The Brigadier General Harrison Jackson Price Scholarship was established by a bequest from the estate of his daughter, Lucille Price Jessup, in memory of her father, who graduated from ONU in 1891 and who taught Military Science and Tactics here. Preference is given to a male student enrolled in ROTC.
- The Virginia H. Redick Scholarship was established by Virginia H. Redick, BSED 1964. Income from the fund, as determined under applicable University policy, shall be used to provide scholarships to qualified students at Ohio Northern University.
- The Julia M. Reeder Scholarship Fund was established through the will of Mrs. Homer F. (Julia M.) Reeder for worthy students from Allen or Hancock Counties.
- The Ritchie Family Scholarship was established by Helen M. Maddock to honor her grandmother, Anna M. Ritchie, who attended ONU; her mother, Doris Ritchie Maddock, Ped. Grad. 1918; her great uncle, Tom Hall Ritchie, BSEd 1921; and her grand nephew, Troy A. Essex, BS 1997, for a qualified student with financial need with preference given to students from Paulding and surrounding counties in northwestern Ohio.
- "The Robby" fund was established by friends of Bill Robinson, BSEd 1961, to be used at Mr. Robinson's discretion to aid students as deemed necessary.
- The Robertson Financial Aid Fund was presented by Howard N. (Jim) Robertson, PhG 1924 and his wife, Edith, for qualified and worthy students with financial need.
- The Robuck Memorial Scholarship was established in memory of Dr. and Mrs. O.S. Robuck by their family.
- The Karl and Kay Roider Scholarship was established at Karl's passing by his family—wife, Kay; son, Karl, Jr.; and daughter, Ruth—to assist worthy undergraduates at Ohio Northern University. Karl Roider was on the music department faculty for 31 years, served as chair of the department for 24 years, and was given an honorary doctorate from the University in 1985. Kay Roider was a member of the mathematics department for 18 years.
- The Rothrock Student Aid Fund was established by George B. Rothrock, BSME 1923, a native of Ada, Ohio, in memory of his father, George B. Rothrock, Ada businessman for forty years. The scholarship is awarded to either a graduate of Ada or Hardin Northern High Schools or to graduates of Upper Scioto Valley, Allen East, Bluffton or Cory-Rawson High Schools who have financial need.

- The Richard W. Routh Scholarship was created through a bequest from Helen W. Routh of Cuyahoga Falls, Ohio, in memory of her deceased son.
- The Arthur and Marian Rudd Scholarship was established by the estate of Mrs. Rudd to assist deserving, undergraduate students, with preference to those from Allen and Auglaize Counties of Ohio.
- The Charlotte R. Schmidlapp Scholarship was established by the Charlotte R. Schmidlapp Fund, Fifth Third Bank, Trustee, of Cincinnati, Ohio, to endow a scholarship to support women majoring in mathematics and the sciences, including Pharmacy, who are deemed worthy of financial assistance. Preference will be given first to students from Piqua, Ohio, or the greater Cincinnati/Northern Kentucky area, with second preference for a young woman from the State of Ohio.
- The Jacob G. Schmidlapp Scholarship establishes a loan fund for students and was created by the Fifth Third Bank of Cincinnati.
- The Lucile Grappy Schneider Scholarship was established by the estate of Lucile Grappy Schneider, a retired Lima school teacher, who received an education degree from ONU in 1926.
- The Ralph Sealand Scholarship was established by Mrs. Arabella Canfield Sealand in memory of her son. The scholarship is awarded to a worthy student with recognized financial need.
- The Seiler Student Aid Fund was presented by Dr. M.S. Seiler, LLB 1910, in memory of his wife, Marie, for a student with financial need in the health professions.
- The Richard L. and Fred D. Shanely Scholarship is given in memory of Fred D. Shanely, BSEE 1925, by his family. It is awarded to academically qualified students with preference given to students participating in athletics.
- The Yousef K. Shuhaibar Scholarship for International Students was established by Dr. Shuhaibar, BSCE 1964, D. Engr. 1988, prominent engineer, businessman, and consultant in his homeland of Kuwait.
- The Isabel Sloan Award was established by Isabel Sloan, BA 1929, for a worthy female student who graduated from Kenton High School.
- The Albert and Harriet Smith Scholarship is given to a student in accordance with university financial aid policy.
- The Marjorie Detrick Snyder and John M. Snyder Scholarship Fund was established by the estate of John M. Snyder in memory of his wife (AA 1928) to aid in defraying tuition costs for worthy and needy students of the University.
- The Martin Luther and Ola Snyder Scholarship was established in memory of Martin Luther Snyder, BA 1894, and Ola Fiess Snyder, BS 1895, by their sons Mr. and Mrs. Barton Snyder and Mr. Ralph Snyder.
- The Danford Spence Scholarship Fund was created by a gift from the estate of Danford Spence for students from Noble County.
- The Avaneil Stambaugh Scholarship is awarded to worthy graduates of Ada High School.
- The John and Rhea Stambaugh Scholarship was established by a bequest of Mrs. Rhea Stambaugh of Plymouth, Ohio, for general university scholarships.
- The Dr. and Mrs. David L. Steiner Scholarship Fund was established through the generosity of Dr. and Mrs. Steiner to assist academically worthy students with financial need at Ohio Northern.
- The Reba Stemen Scholarship Fund was established by a bequest from the will of Reba Harriett Stemen, AA 1934, BA 1936, to assist worthy students attending the University.
- The Stansloski - Romans Scholarship was established by Donald W. Stansloski and Patricia A. Stansloski née Romans to support an undergraduate Native American student.
- The Glenna and Lucille Stout Scholarship Fund is awarded by a Lancaster church to a student selected by them.
- The Weir - Gray Family Scholarship was established through the generosity and efforts of David Weir, BSCE 1959, and Judy Reed Weir, BSEd 1960, and the Weir and Gray families to assist academically worthy engineering and psychology students with financial need and who are active in campus activities.
- The Dana E. and Gladys B. Welsh Scholarship was established through a bequest of Gladys Blair Welsh, AA 1928. The scholarship will be awarded in alternate years in the College of Pharmacy and the College of Arts & Sciences. Preference will be given to a graduate of Ada High School.
- The Whirlpool Corporation Scholarship, to assist academically eligible students at ONU, was established through the generosity of the Whirlpool Foundation. It was established to honor the service of several ONU graduates working for the Whirlpool Corporation.
- The W.K. Whitehead Scholarship was established through a gift from John C. Stahler, M.D. to assist academically worthy students with financial need from the Riverside Local School District, DeGraff, Ohio.
- The David V. Wisher Scholarship was established by the estate of David and Helen Wisher to provide financial assistance for two students from the Spencerville, Ohio school district enrolled in the fields of law, engineering or pharmaceutical studies at Ohio Northern University. Mrs. Wisher obtained the AA degree in 1937 and a BSEd degree in 1942.
- The Helen E. Wisher Scholarship was established by the estate of David and Helen Wisher to provide financial assistance for two students from the Spencerville, Ohio school district enrolled in the fields of law, engineering or pharmaceutical studies at Ohio Northern University. Mrs. Wisher obtained the AA degree in 1937 and a BSEd degree in 1942.
- The Geraldine Wright Wilkinson Fund was established by bequest of Charlotte Wilkinson to honor the memory of her sister. The award is made annually to a worthy student.
- The President and Mrs. Robert Williams Scholarship Fund was established by their daughter, Mrs. Larry (Florence) Zehner, XBA 1944. Dr. Williams was president of Ohio Northern University 1930-43.
- The Moston and Opal Wood Student Aid Fund was established by a bequest from the estate of Opal M. Wood, widow of Moston W. Wood, BA 1932, to assist worthy students to attain a college education.
- The Ronald L. Woofter Scholarship was established by Mr. and Mrs. Stanley Woofter in honor of their son, Ronald, BA 1961, who was president of the ONU Alumni Association, 1985-87.
- The D. Carl Yoder Scholarship was established by a bequest from his daughter, Dorothy L. Yoder.
- The Fred F. Fox Scholarship was established through a bequest from Fred F. Fox, JD 1950 of Caldwell, Ohio. The award of the scholarship shall be limited to applicants who are residents of Noble County, Ohio. Each scholarship shall be renewed annually for four years for undergraduate students and for the average total annual period for a graduate program. Renewal shall be subject to the maintenance of scholarship criteria as established by Ohio Northern University.

Arts & Sciences Scholarships

- The Ada Community Theatre Award was provided by the former Ada Community Theatre group for Ada area students who contributed most to theatre.
- The Jean and Walter Armes Scholarship was established by Walter, BSEd 1961, and Jean Armes for students preparing for a teaching career in the public school system.
- The College of Arts & Sciences Alumni Scholarship was established by alumni of the College to perpetuate scholarship in the arts and sciences. The scholarship will be awarded to a student in the College of Arts & Sciences with financial need and preference will be given to children of arts and sciences alumni.
- The Banks Family Scholarship was established to honor Joseph, BS 1941 and BA 1946, and his wife, Thelma Banks of Ada, Ohio by family and friends. Joe was a coach/assistant professor and athletic trainer at ONU from 1971-1984 and a part-time admissions counselor from 1985-2002. The scholarship will be awarded to worthy students who are studying to be athletic trainers.
- The Edith Rhoten Banyas Scholarship was established by John W. Banyas, BSEd 1939, family and friends in memory of his wife, Edith Rhoten Banyas, BA 1939. Preference is to be given to high school graduates with financial need from Highland and Ross Counties of Ohio.

- The Beachler Scholarship Fund was established by Mrs. Mabel Andrews Beachler, AA 1930, for a deserving, qualified student in the College of Arts & Sciences.
- The John W. and Marvel Bielstein Scholarship was established by a bequest from John W. Bielstein in memory of his wife, Marvel, BSEd 1959. Mrs. Bielstein, for whom teaching was a second career, taught in the Bath Township School District. Preference for the scholarship to be given to a student majoring in elementary education.
- The Wilfred E. Binkley Scholarship was established by Robert J. Huffman, BA 1959, JD 1960; Raymond L. Landis, BA 1964, JD 1967; and Gary L. Weaks, BA 1967, JD 1970; alumni and partners in the law firm of Huffman, Landis, Weaks and Lopez of West Milton, Ohio. The scholarship is in memory of Professor Binkley, long-time professor of political science at Ohio Northern University. Preference for the scholarship will be given to a student majoring in political science from southwestern Ohio. This student shall have been recommended by the Department of History and Political Science and financial need is not a necessary factor.
- The Biological Sciences Scholarship Fund was established by Russell W. Moore, Jr., BA 1971 and Sandra Lee Bouwman of Huntersville, NC. Scholarship recipients will be limited to Ohio Northern University students who are majoring in biology and are deemed worthy of financial assistance as judged by the financial aid office and the biology department chairperson.
- The Biological Sciences Scholarship Fund was established by Russell W. Moore, Jr., BA 1971 and Sandra Lee Bouwman of Huntersville, NC. Scholarship recipients will be limited to Ohio Northern University students who are majoring in biology and are deemed worthy of financial assistance as judged by the financial aid office and the Biology Department Chairperson.
- The Robert L. Bowden Scholarship was established in memory of Professor Robert L. Bowden by his widow, Mary Stambaugh Bowden, and family and friends of the late Dr. Bowden, who, for many years, was professor of biology and department chair from 1952-1979.
- The Florence Brooks Memorial Scholarship was established by Philip, BSCE 1965, and his wife, Barbara, BSED 1967. Brooks of Fremont, Ohio in memory of his mother Florence Brooks, BS 1957. Awards will go to students deemed worthy of financial assistance.
- The Cliffe Deming and Okla Deming Brooks Scholarship was provided by Drs. Ivan and Mary Elizabeth Combe of White Plains, New York and friends of Ohio Northern University, as appropriate and meaningful tributes to Mrs. Okla Brooks and Professor Cliffe Deming. Annual income from this endowed fund shall be divided into two equal awards and presented to one needy, talented, highly motivated student majoring in Fine Arts, Fine Arts History, or Music; and to one equally deserving needy student majoring in speech or drama.
- The Erika Jane and Andra Elaine Brubaker Memorial Scholarship was established by Dr. Inara Mencis Brubaker. BS 1959, of Bluffton, Ohio, in memory of her daughters, Erika Jane and Andra Elaine Brubaker. The award will go to worthy students in the College of Arts & Sciences pursuing a major in chemistry.
- The Joanne Carman Award was established by Joanne Carman, BSED 1971, to provide assistance to a graduate of a Hardin County, Ohio high school who has completed his/her junior year in teacher education and who has the highest grade point average among the eligible education majors.
- The Chemistry Alumni Scholarship was established by the Chemistry Alumni under the leadership of Dr. Jerry L. Franz, 1965.
- The Reva L. Clarke Memorial Nursing Scholarship was established by family and friends in memory of Reva L. Clarke to assist students pursuing a Bachelor of Science in Nursing degree.
- The Clausing/Cotsamire Scholarship was established by Mrs. Persis Clausing, AA 1927, and her daughter and son-in-law, Mr. and Mrs. Harold Cotsamire. Mr. Cotsamire was controller of the University for 33 years, 1957-1990. It is presented to a student majoring in elementary education.
- The Wilbur R. Cornetet Scholarship was established by a bequest from his daughter, Lucile Cornetet, to benefit students pursuing studies in education, foreign languages, and English. Mr. Cornetet graduated from Ohio Northern University (Ohio Normal School) in 1901.
- The Helen Crafts Memorial Scholarship is awarded to worthy students with financial need.
- The Leslie and Marie Cribley Scholarship was established through the generosity of Mrs. Marie Cribley to assist academically worthy music students with financial need, preference for piano, violin, and guitar. Preference shall be given to Ada, Ohio, high school students. Mrs. Cribley established this scholarship in honor of the memory of her husband, Leslie, BA 1930.
- The Clifford and Thelma Dickson Scholarship is awarded to worthy students with financial need.
- The Clyde Dornbusch/Charles "Todd" Oliver English Scholarship shall be awarded on a yearly basis to a senior who shows a vital understanding of, and increased appreciation for, the place of great literature in the English-speaking world.
- The Elbert F. and Else C. Eibling Scholarship was established through the will of Mr. and Mrs. Eibling to assist needy students. Mr. Eibling was a 1925 A.B. graduate of the University.
- The Fred Martin Ernsberger Scholarship was established by Mrs. Ruth E. Ernsberger in memory of her late husband, Fred M. Ernsberger, BA 1941. The award will be limited to ONU students including incoming freshmen deemed worthy of financial assistance, majoring in Chemistry with a minimum GPA of 3.2.
- The Clista M. and Hugo L. Fahncke Scholarship Fund was established by Mrs. Clista M. Fahncke to assist a qualified undergraduate student preparing for church work.
- The Josephine Royon Feth Scholarship was established through a bequest from her husband Mr. William J. Feth, BSEE 1940, to honor his wife, BSED 1940, and to support a deserving student working toward a teaching career in secondary education (junior or senior high school); second choice would be any deserving student working towards a career in teaching.
- The Roland R. Foley Scholarship Fund was established in 1985 by the will of Roland R. Foley, BS 1912 and BSpH 1912, for students in the arts and sciences and pharmacy colleges.
- The Donald E. Geist and Geraldine Park Geist Scholarship was established in memory of Geraldine Park Geist, BA 1928, by her husband, Donald E. Geist, BA 1929. Preference is given to a student majoring in languages or music.
- The Mr. and Mrs. C. H. Ginn and Mr. and Mrs. Robert M. Peters Scholarship was established by Miss Vera DoLean Ginn, AA 1928, BSED 1954, in memory of her mother and father, Martha Boyle Ginn and Cecil H. Ginn, and sister and brother-in-law, DeLores B. and Robert M. Peters, for a student in financial need from Shelby County, Ohio, who is majoring in elementary education.
- The Rev. Dr. and Mrs. L. Mark George Scholarship was established through the generosity of the East Ohio Conference of the United Methodist Church and the Rev. Dr. Mark and his wife, Gaynalee George, on his retirement as administrative assistant to the Bishop of the East Ohio Conference. Rev. Dr. George also served as a member of the Board of Trustees of Ohio Northern University from 1990-1998. The income from the fund will provide financial aid for a worthy student preparing for a career in the ministry.
- The Frederick R. and Geneva Heifner Scholarship was established by Mr. and Mrs. Heifner for a student(s) majoring in biology or the environmental sciences in the Getty College of Arts & Sciences.
- The Mildred Lowman Henning Memorial Music Fund was provided by Mrs. Mildred Lowman Henning, XBA 1923 in music, Ada, Ohio, in recognition of Mrs. Henning's interest and accomplishments in the field of music. The scholarship funds music majors with preference given to voice majors.
- The Heterick - Felker Memorial Scholarship was established by Robert Heterick, D.Humanities 1956, and his wife, Francis Felker Heterick, Honorary MA 1951, friends of the University, who were generous in their support of the University. The award is given to academically worthy students with financial need in the College of Arts & Sciences. The award is also given in the name of Mrs. Heterick's sister, Sophia Felker.
- The Dr. Thomas and Maxine Hoffman Scholarship was established by family and friends of Dr. Hoffman in honor of his 75th birthday on August 22, 2003. The scholarship is for a junior or senior student preparing for the ministry.

- The Glen Hughes and Gay Hughes Young Memorial Scholarship Fund was established by Ruth Hughes Dickey, BA 1930, family, and friends in memory of Dr. G. Glen Hughes, BA 1929, DD 1951, and ONU trustee, and his daughter, Mrs. Gay Hughes Young, BSED 1955. Annual awards shall be made to an industrious student in the College of Arts & Sciences who has financial need, high ideals, and is of at least average academic standing.
- The Mr. and Mrs. Torrey A. Kaatz Scholarship is to be awarded to any deserving student in the College of Arts & Sciences. Mr. Kaatz was a member of the Board of Trustees 1971-1976.
- The M. A. Purpus Kehoe Scholarship was established to provide funds for a student in Arts & Sciences.
- The Clona E. Kinzey Memorial Scholarship was established by a bequest from Mrs. Kinzey.
- The Helen M. Kopf Scholarship was established by Helen M. Kopf, XBA 1917, to be awarded each year to a student or students in the College of Arts & Sciences preparing for a career in teaching or full-time Christian service.
- The Dr. James H. Kritzer Memorial Premedical Scholarship was established through a gift from the Community Hospital Foundation of Houston, Texas. Dr. Kritzer, BA 1940, a Hardin County native, had a distinguished career in radiology in the Houston, Texas area. The award is made annually to a rising senior chemistry or biochemistry major who has good character and is likely to establish a career of significant service to medicine.
- The Lacey Family Scholarships were established by the estate of Zelma C. Lacey in memory of Mr. and Mrs. John W. Lacey, Warren D. and Zelma C. Lacey of Liberty Township, Ada, Ohio, for worthy students.
- The Clyde A. Lamb Memorial Scholarship was established by family and friends in 1970 to honor the memory of Mr. Lamb, Professor of Health and Physical Education, Department Chairman, and Football Coach, 1930-1969. It is awarded to one worthy male and one worthy female student majoring in physical education.
- The Alice L. LaRue Endowed Scholarship was established through a bequest of her daughter, Stella Alice LaRue, BSED 1952, of Ada, Ohio. The award is to go to students worthy of financial assistance, with preference for those earning their degree to become teachers.
- The Gayle Lauth Endowed Fund was established for a senior graduating in the Department of Human Performance and Sport Sciences, with teacher licensure. The recipient, male or female, should have the highest ranking GPA in the department.
- The Marian M. Laybourne Art Scholarship Award is given annually to a freshman art major in memory of Marian Laybourne and her appreciation of the talent of young artists.
- The Vance B. and Iva A. Leonard Scholarship was presented by Vance B. Leonard, and Fred G. and Lucienne O. Sprang. Preference is given to a Hardin County student in the College of Arts & Sciences.
- The Lima News Scholarship Fund was established by a gift from The Lima News, a division of Freedom Newspapers, Inc., for a qualified student majoring in English with a minor in journalism.
- The Lima Symphony Orchestra Award is given to a music major who is a first time matriculant at ONU.
- The Robert and Vivian Logsdon Endowed Scholarship Fund was established by Paul Malcolm Logsdon, Director of the Heterick Library and professor at Ohio Northern University to honor the memory of his parents, Robert and Vivian. Scholarship recipients will be limited to students enrolled in the nursing program including entering freshmen, who are deemed worthy of financial aid.
- The Helen Spar Ludwig Scholarship was established by family and friends to honor Dr. Ludwig, Associate Professor of Physical Education, Director of Women's Physical Education, and Coach of Women's Athletic Teams from 1963-1984. Dr. Ludwig was the first woman to be inducted into the University's Athletic Hall of Fame. It is awarded to a worthy student majoring health and physical education who has financial need.
- The Mary Alice Lyon Scholarship was established through the will of Mary Alice Hickman Lyon, BSEd 1957. Mrs. Lyon was a retired school teacher and member of the United Methodist Church.
- The Peggy Joyce Lyon Scholarship was established through the will of Mary Alice Hickman Lyon, BSEd 1957. Mrs. Lyon was a retired school teacher and member of the United Methodist Church.
- The Ray Lyon Scholarship was established through the will of Mary Alice Hickman Lyon, BSEd 1957, for a male student in a science-related field. Mrs. Lyon was a retired school teacher and member of the United Methodist Church.
- The Dr. Anthony J. and Mrs. Doris E. Martin Scholarship was established through a trust by Anthony, BA 1931 and Doris Martin of Atlanta, Georgia. The scholarship is for sophomores or above who are entering the pre-med (medical school), pre-physician assistant, pre-optometry, pre-physical therapy, pre-occupational therapy, clinical laboratory science, or nursing areas of instruction in the Department of Biological and Allied Health Sciences, the Department of Chemistry and Biochemistry or majors in other departments following these prescribed curricula. Dr. Martin operated a medical practice in Atlanta, Georgia until his retirement. The Martins were avid, active supporters of Ohio Northern University up until their deaths in 1997 and 2005 respectively.
- The Frederick Masnaghetti Marlo Endowed Scholarship was established by Fred Marlo, BSED 1949 of Reno, NV. The annual scholarship will be awarded with preference for deserving American Indian students and/or students deemed worthy of financial assistance who are pursuing a high school teaching career in the academic fields of English and/or journalism.
- The Brett and Cheryl Mason Capital Leadership Award was established through a gift from the Hon. Cheryl L. (McCain) Mason, BA '86 and Lt. Col. (Ret.) Brett S. Mason, BSEE '86 to provide financial support in the form of student grants to ONU students enrolled in the Getty College of Arts & Sciences or the T.J. Smull College of Engineering who have secured an internship position in the Washington, D.C. area.
- The Dr. Anthony and Mrs. Doris E. Martin Scholarship was established through a trust by Anthony, BA 1931 and Doris Martin of Atlanta, GA. The scholarship is for sophomores or above who are entering the pre-med (medical school), pre-physician, pre-optometry, pre-physical therapy, pre-occupational therapy, clinical laboratory science, or nursing areas of instruction in the Dept. of Biological and Allied Health Sciences, the Dept. of Chemistry and Biochemistry or majors in other departments following these prescribed curricula.
- The Ray and Margaret McCleary Scholarship was established by Dr. Ray L. McCleary, BA 1929, and Mrs. Margaret McCleary, to aid a qualified student in the Getty College of Arts & Sciences.
- The Charlene S. McComas Memorial Scholarship for English was established through the generous contributions of her parents, siblings and family members, as a tribute to the memory of Charlene Sue McComas, BA 1970. With a degree in English and having been highly involved in campus activities, Ms. McComas went on to pursue a distinguished career in public relations and corporate communications, both as a writer and an editor. The scholarship is limited to a female in the College of Arts & Sciences who has declared English as her major, carries a cumulative GPA of 3.0, be in at least year two (sophomore) of her academic career and provide proof of financial need.
- The Charlene S McComas Memorial Scholarship for Public Relations was established through the generous contributions of her parents, siblings and family members, as a tribute to the memory of Charlene Sue McComas, BA 1970. With a degree in English and having been highly involved in campus activities, Ms. McComas went on to pursue a distinguished career in public relations and corporate communications, both as a writer and an editor. The scholarship is limited to a student in the College of Arts & Sciences who has declared Public Relations as his or her major, carries a cumulative GPA of 3.0, is in at least the second (sophomore) year of his or her academic career and provide proof of financial need.
- The McElroy - Landon Scholarship Fund was established by Mrs. H. Lelma McElroy as a memorial to her husband, George W. McElroy, her father, Clifford F. Landon, and her grandfather, Luzerne E. Landon. Awards are made based upon university financial aid policy.
- The George W. and Ada A. McGilliard Scholarship was established by Dr. Stanley H. and Mildred I. McGilliard for students preparing for ministerial service.
- The Dr. and Mrs. John V. Melick Scholarship was established by John V., Honorary DBA 1951 and his wife Mable F. Melick of Sylvania, Ohio. The scholarship is to be awarded to a student in pre-ministry or church work.

- The Merle H. and Muriel Neuman Mertz Scholarship was established by a bequest from Mrs. Muriel Mertz to assist worthy and deserving Ohio Northern University students who are United States citizens and who are history majors in the University's College of Arts & Sciences.
- The Henry L. and Geraldine Metzger Scholarship was established by Dr. Henry L. Metzger, BSED 1941, DBA '94, and his wife, Geraldine, of Sharon Center, Ohio. The late Dr. Metzger, a retired insurance executive, was the president of the Hillier Family Foundation. The ONU Nature Center in Tuscarawas County is named for Dr. and Mrs. Metzger.
- The Samuel L. and Martha R. Meyer Student Aid Fund, was established by Dr. and Mrs. Samuel Lewis Meyer as an appropriate expression of their continued support for the educational concept available through church-related, private higher education. The award is presented to a worthy student who has demonstrated financial need and a preferential interest in oratory and debate.
- The Judith D. (Jacobs) Mifsud Endowed Scholarship Fund was established in 2013 by Judith Mifsud because of her belief in education and the teaching profession. Scholarship recipients must be deemed worthy of financial assistance and pursuing a degree in education in the College of Arts & Sciences at Ohio Northern University with preference to sophomores, juniors and seniors.
- The Mitchell Award for Botanical Research was established by Lois Mitchell Seaton to assist a student engaged in botanical research.
- The Norman - Davis Student Aid Fund was established through a bequest from Mrs. Blanche A. Norman, BSEd 1925, in memory of her husband, William A. Norman, her parents, Charles and Euphie Davis, and her sister, Mae E. Davis. Awardees are selected on the basis of university financial aid policy.
- The Osmon Award, in memory of Alton, Asa, and Frank Osmon, was provided by their niece, Mildred Osmon Smith, BA 1924, Piano 1925, and her husband, Paul P. Smith, BSEE 1924. The award is given to music majors in compliance with university financial aid policy.
- The Florence Overmire Scholarship was established by Florence F. Overmire of Arcadia to assist a qualified student in the Getty College of Arts & Sciences.
- The Lois Cook DuBois Pavlik Scholarship was established in 1999 by Linda Hoffman in memory of her late mother, a 1935 graduate of Ohio Northern University. The award shall be given to students pursuing a career in music education. Preference shall be given to students from Allen County in the State of Ohio.
- The Shelley C. Petrillo Musical Theatre Scholarship was presented by Mr. and Mrs. Orlando Petrillo in memory of their daughter, Shelley. It is awarded to a junior majoring in musical theatre upon recommendation by the faculty of the department of communication arts.
- The Shelley C. Petrillo Theatre Scholarship is presented by Mr. and Mrs. Orlando Petrillo in memory of their daughter, Shelley.
- The Shelley C. Petrillo Scholarship is presented to a senior art student by Mr. and Mrs. Orlando Petrillo in memory of their daughter, Shelley.
- The Shelley C. Petrillo Junior Art Award was presented by Mr. and Mrs. Orlando Petrillo in memory of their daughter, Shelley.
- The Willis F. Porter Scholarship Fund is provided by a bequest from the estate of Mildred E. Porter in memory of her husband, Willis F. Porter, BSED 1935, for a student majoring in education who has high academic ability and financial need.
- The Mary Hughes Reames Scholarship was provided through the will of Mary Hughes Reames, an alumna and friend of ONU. Awards are made to deserving students.
- The Walter Pingrey Rogers Award provides scholarships to outstanding students.
- The Linda S. Scheuerman Scholarship Fund is awarded to a senior chemistry major selected by the department chairman. This scholarship is awarded in honor of Dr. Bryon Hawbecker.
- The Mary Jane and E. Meredith Schwartz Scholarship in Biology is awarded to a worthy student demonstrating need.
- The Winifred K. Sebald Scholarship was established through the estate of Mrs. Winifred Jobson Sebald, AA 1936, to assist economically needy students seeking a degree in Education.
- The James Banning Smith and Helen Miriam Crider Smith Memorial Scholarship Fund was established by Mr. and Mrs. Thomas Smith, in memory of his parents, to assist a freshman pursuing a degree in education.
- The Mildred Osman Smith, BA 1924, Piano 1925, and Paul P. Smith, BSEE 1924, D.Engr. 1975, Fund was organized for chemistry majors.
- The Thurman H. and Margaret R. Smith Scholarship was established by the estate of Mr. Smith and shall be awarded to a student majoring in education from the Lima, Ohio area.
- The Dorothy Enid Kinnard Snedden Memorial Scholarship Fund was established by Dr. Harold E. Snedden, BA 1937, and family in loving memory of their wife and mother. The scholarship is awarded annually to a senior who is majoring in English and/or journalism and is in good academic standing.
- The Snyder Scholarship was established in memory of Martin Luther Snyder, BA 1894, and Ola Fiess Snyder, BS 1895, by Mr. and Mrs. Barton Snyder and Mr. Ralph Snyder.
- The Beall Snyder Student Aid Fund was provided by Ada native, Mrs. Augustus Beall, BA 1901, (Orchie Snyder), in memory of her parents, Sam and Margaret Stemple Snyder, for a music student with financial need.
- The Dorothy and Lowell Snyder Music Scholarships were established by Mr. Snyder to honor the memory of his wife.
- The Dorothy Ames Snyder Piano Scholar of the Year Award is awarded annually to the piano student chosen by the Music Department Faculty as having made the most progress during the year.
- The C. Austin and Mary Bess (Hauman) Sprang Scholarship was established in honor of C. Austin Sprang, BSEd 1936, and in memory of his wife, Mary Bess (Hauman) Sprang, BA 1933. It is awarded annually, with preference given to a student in the teacher education curriculum of the College of Arts & Sciences.
- The F. G. and Amy Sprang Scholarship was established by their children and spouses: Fred G., BA 1943, and Lucienne O. Sprang; C. Austin, BSEd 1936, and Mary Bess Hauman, BA 1933, Sprang; Vance B., BA 1931, and Ira Rilla Sprang Leonard. F. G. Sprang attended Ohio Normal School in 1902. Scholarship is to be awarded each year with preference given to a student in the College of Arts & Sciences from Hardin County, Ohio.
- The Fred G. and Lucienne O. Sprang Scholarship was established by Fred G., BA 1943, and Lucienne O. Sprang to be awarded annually with preference to be given to students in the College of Arts & Sciences from Hardin County, Ohio.
- The Sprint/United Telephone Scholarship is to be used to support students in the department of education, College of Arts & Sciences.
- The A. and B. Stambaugh Scholarship was established through a bequest from Mrs. Beatrice (Snyder) Stambaugh. Mr. Stambaugh received an AB degree in 1905 and Mrs. Stambaugh received an honorary Arts & Sciences degree in 1911 from ONU.
- The Easter Straker Scholarship Fund was established by the community and her friends. It is intended to be an annual award given to a communication arts student, preferably one pursuing a career in broadcasting.
- The Joseph S. Uhl, BSEd 1933, Scholarship was established in 1973 by his wife, Rosemary Mohler Uhl, and family for a physical education major who has financial need, personal character, scholastic ability, and athletic ability.
- The Vukovich Scholarship for Excellence in Mathematics and Science was established by Dr. Thomas Vukovich, '65 and Dr. Diane Vukovich in support of excellence for the teaching of mathematics and/or science. Both Thomas and Diane have served as educators and leaders in higher education. This scholarship aims to build upon an expectation for continued academic excellence at Ohio Northern University in addition to exemplary leadership in service to others. The award is for Ohio Northern students including incoming freshmen who are deemed academically worthy of financial assistance and seek a career as educators in the fields of mathematics and/or science.

•The Martha Gesling Weber Award was established by Dr. Martha Gesling Weber, BA 1935, and her husband, Joseph. The award will go to one or more chemistry major(s) who have been accepted for admission to an M.D. degree-granting medical school.

•The Ruth E. Weir Memorial Scholarship was established by Ruth E. Weir, BA 1940, through a bequest. The fund will assist deserving students in the College or Arts & Science who are graduates of high schools in either Hardin or Hancock County, Ohio.

•The Victor and LaDona (Church) Wellman Scholarship Fund was established to assist one student in the College of Arts & Sciences and one student in the College of Engineering.

•The A. G. Welshimer Student Financial Aid Fund was established by Pauline Welshimer in memory of her father, Class of 1908, longtime educator and superintendent of schools in Champaign and Logan Counties of Ohio. The annual income is to be given to a worthy student, with preference given to those students interested in the field of education.

•The Beverly Ann White Memorial Scholarship was established by Walter L. White, BA 1941, JD 1948, Alum Cit. 1994, Honorary Doctor of Law, 2000 and his wife, Helen W. White, as a memorial to their daughter, Beverly. The scholarship is to be awarded annually to a student with financial needs and deserving a quality education from the College of Arts & Sciences.

•The Dr. S. Lee Whiteman Scholarship was established by the United Methodist Laymen of the Ohio Conference in memory of the late trustee and alumnus for pre-ministerial students.

•The Dale and Norma Wilhelm Scholarship was established by a gift from Dr. and Mrs. Dale Wilhelm and family members. The award is to provide financial assistance to a first-generation college student in the College of Arts & Sciences.

•The Edwin L. and Rosie Williams Trumpet Endowed Scholarship was established by family and friends to honor the memory of Dr. Edwin L. Williams, professor and chair of the Department of Music at Ohio Northern University and his wife, Rosie, music lecturer and resident artist. The scholarship is for a qualified senior music major who is a trumpet student.

•The Valerie Wilson Piano Award is presented at Honors Day.

•Willis H. and Mignon Winkler Memorial Scholarship was established through the estate of Willis H. Winkler, BA 1927.

•The Dr. Laurence N. Woodworth Scholarship was established by his family and friends in memory of Laurence N. Woodworth for history and political science students with demonstrated financial need.

•The Yinger Memorial Scholarship was presented by Dr. Mary Yinger, D.O., as a memorial to her husband, Dr. Elmer Yinger, D.O. It is awarded to a student in the department of art.

•The Barbara L. Yoost Nursing Scholarship was established by Rev. Dr. Charles and Mrs. Barbara Yoost to aid students studying nursing who have financial need. Rev. Dr. Yoost is a trustee of the University and Barbara is on the faculty of Kent State University College of Nursing.

•The J. Otis Young Student Aid Fund was provided by his family and friends in memory of Dr. Young, former chair of the board of trustees of ONU.

•The Mary J. Young Memorial Scholarship was established by a bequest from Mary T. Hugentugler, a friend of Miss Young. Miss Young started her career as a librarian in the Cleveland Public Schools. She retired from the Los Angeles County Library System.

•The Buster Rozier Nursing/Respiratory Therapist Incentive Scholarship for Minority Students is one avenue being used to encourage promising students to pursue a career in nursing or respiratory. Buster passed June 3, 2014 at Lima Memorial Hospital; although he is no longer here, his legacy will be the Buster Rozier Nursing/Respiratory Therapist Incentive Scholarship for Minority Students.

•The Dr. Charles (Chuck) L. Johnson Memorial Fund is a scholarship endowment will honor the memory of Dr. Charles (Chuck) L. Johnson, Professor of Communications Arts Emeritus. It will benefit students within the College of Arts & Sciences departments of Communication and Media Studies and Theatre Arts.

Business Administration Scholarships

•The Richard W. Allen Memorial Scholarship Fund was established by the United Telephone Company, Mansfield, Ohio. The award is based on university scholarship guidelines.

•The William D. Atteberry Scholarship, established by Dr. William Atteberry of Cincinnati, is for a student in the College of Business Administration.

•The Ethyl and Ernest S. Bartram Scholarship Fund was established by a gift from the estate of Mrs. Ethyl Bartram.

•The Eugene, Herman, Nettie and Leota Beeler Scholarship was established through a bequest by Eugene A. Beeler, BA 1949. Scholarship recipients will be limited to Ohio Northern University students, including entering freshmen, who are enrolled in the College of Business and are deemed worthy of financial assistance.

•The Business College Scholarship was established to provide funds for a student in the College of Business Administration.

•The Phillip D. and Cheryl Caris Family Scholarship was established by Phil, BSBA 1982, and Cheryl Caris of Findlay, Ohio. The award is for students in the James F. Dicke College of Business Administration with financial need.

•The Dr. Charles F. Conklin Memorial Scholarship was established by the estate of Dr. Charles F. Conklin, professor of economics at Ohio Northern University from 1966-1985, to provide assistance to an economics student.

•The Earl V. Dye Scholarship was established by Elizabeth W. Dye, his wife, in memory of her husband, a graduate of 1904. Scholarships are awarded to qualified students in economics and business law.

•The Kenneth R. and Lea A. Elshoff and The Ohio League of Financial Institutions Scholarship Fund was established to honor the outstanding service of Dr. Elshoff to his business profession, as well as his devotion to the community, including service to Ohio Northern University as a trustee. Mrs. Elshoff is also being honored for her extraordinary commitment to community service. Both have been active in many community charitable organizations.

•The Leona and Andrew C. Griffing Scholarship was established by A.C. Griffing, BA 1912, in memory of his wife, for students with above average ability who demonstrate financial need.

•The Gronlund-Keiser Endowed Scholarship was established by Robert (Bob) L. Gronlund, BA 1964, DBA 2009, and his classmate, Terry Keiser, BA 1964 and professor of biological sciences at Ohio Northern University since 1967. Scholarship recipients will be limited to Ohio Northern University students including entering freshmen who are enrolled in the James F. Dicke College of Business Administration, deemed worthy of financial assistance and preference given to students from the State of Pennsylvania, but shall not be limited by this provision.

•The Hamilton Student Aid Fund was established by Julia Harmon Hamilton, in memory of her husband, Royce R. Hamilton, BS 1904. The income from this fund shall be awarded each year to a worthy student with financial need. Preference shall be given to a student in the College of Business Administration.

•The Hampson - Skinner Award is made available to a junior accounting major.

John Bishop and Motorists Insurance Group Endowed Scholarship Fund was established by university trustee John J. Bishop, BA 1972, BSBA 2006, and his wife Shirley, to provide and supplement support for deserving students majoring in the risk management and insurance program of the Dicke College of Business Administration.

•The Pamela S. Hershberger-Ernst & Young Endowed Scholarship Fund was established by Pamela S. Hershberger, BSBA 1987, of Maumee, Ohio. Pam's motto is to pay it forward and she hopes that the establishment of this scholarship fund will allow the next generation of accountants to receive that same foundation for a successful career in accounting as she has at Ernst & Young. Recipients must maintain a 3.0 GPA and be majoring in accounting.

•The Hillier Trust College of Business Administration Invested Scholarship was made possible by the Hillier Family Foundation. Scholarships from the fund are to be awarded annually to outstanding ONU undergraduate students who are graduates of Evart (Mich.) High School or of high schools in Ohio's Summit or Medina counties. The foundation was established by the children of Robert E. Hillier.

•The George C. Hindall Scholarship was established through the generosity of Mrs. George "Billie" Hindall and sons, Geo, Steven, and William Bradley, to assist academically worthy business students with financial need. A preference is given to students from Hardin County, Ohio, in consultation with ONU's athletic director.

•The Taffy Howard, BSBA 1988, and Brenda Johnson, X1989, Award is presented to a business student annually in their memory by Dr. William D. Atteberry.

•The Taffy Howard - Brenda Johnson Scholarship is awarded to deserving students in the College of Business Administration by family, friends and alumni in memory of Taffy Howard, BSBA 1988, and Brenda Johnson, X1989.

•The Brenda Johnson Memorial Scholarship was endowed by the Doyle Johnson family in honor of their daughter and sister, to be used by the College of Business Administration, preferably for accounting and/or marketing majors.

•The Marion K. and Alma B. McKay Fund is presented to an economics student who has financial need.

•The Janice Graeser Mitchell Memorial Scholarship was established in Mrs. Mitchell's memory, XBSEd 1950, by her husband, James R. Mitchell, BSEE 1949, to benefit advanced students in the College of Business Administration.

•The Henry (Harry) C. and Frances L. Richards Scholarship fund was established by Henry C. Richards, Jr. and Susan J. Richards of Toledo in honor of Mr. Richards' parents, Henry C. Richards and Frances L. Richards. The scholarship is to be awarded to students enrolled in the College of Business Administration with preference given to residents of Lorain County, Ohio.

•The C. William Verity Junior Award is presented to a College of Business Administration student with excellent academic achievement.

•The Dr. Ronald G. Weber Scholarship was established by Mr. and Mrs. Henry L. Metzger to honor Dr. Weber, consultant in the ONU Development Office, 1984-2003. The scholarship is granted to an outstanding student in economics upon recommendation of the faculty of the College of Business Administration.

•The Michele and Paul Govekar Award in Management Endowed Fund is for a student (an incoming freshman in business is preferred) majoring in management and can be renewed pending a yearly average GPA of 3.0 or greater. This award will be determined by the dean's discretion and should go to a student who maintains their major in management.

•The Harold C. Hodson Scholarship will assist college of business administrative students.

Engineering Scholarships

•The Norman D. Ackley Electrical Engineering Scholarship Endowment Fund was established by Mr. Ackley through a bequest in his will to assist worthy electrical engineering students at the University.

•The Frank J. Aimutis Scholarship was established in memory of Mr. Aimutis (BSEE 1917) by his wife, Neva Thomas Aimutis (AA 1920) to assist students majoring in engineering or law.

•The Joseph W. Alspaugh and Stella M. Alspaugh Memorial Fund was established by a gift from the estate of Stella M. Alspaugh for needy and deserving students in engineering.

•The Alumni Civil Engineering Scholarship was established by alumni of the College of Engineering. The award is to go to a worthy student in the College of Engineering majoring in Civil Engineering.

•The American Trim Scholarship was established by American Trim, formerly the Superior Metals Products Company of Lima, Ohio. The award is for a qualified student in the College of Engineering.

•The Russell J. and Maybelle L. Anspach Scholarship was established by a trust distribution from Maybelle L. Anspach to benefit junior or senior engineering students.

•The Dean Lawrence H. Archer Scholarship is given to an academically worthy student who has financial need.

•The Jacob H. Beach Scholarship has been established by Mrs. Carl (Anna A.) Weber for a worthy student.

•The Beene Student Aid Fund was established by Herbert K. Beene, BSCE 1925, in memory of his wife, Adella Margaret Beene, for a worthy student with financial need.

•The Victor G. and Anna Mae Beghini Scholarship was established by Victor and Anna Mae Beghini of Houston, Texas to assist worthy students in the College of Engineering. The recipient must be a sophomore, junior, or senior majoring in mechanical or electrical engineering maintaining a minimum GPA of 2.75. The recipient must also write a letter each year to the donor explaining their Ohio Northern experience and plans for their professional life after graduation.

•The Max J. and Viola C. Bielenberg Memorial Scholarship was established by Mrs. Marlene Bielenberg Barr in honor of her parents. It is awarded to civil engineering students.

•The Braun Financial Aid Fund was established by Karl Braun, BSCE 1919, for an engineering student with financial need.

•The Ralph W. Briggs Scholarship has been established for engineering students from the South.

•The Leif Clayton Brown Scholarship Fund was established in memory of Leif Clayton Brown, ME 1916, by Mrs. Audine Stearns, his sister. It is awarded to a qualified and deserving student.

•The Bruce and Jane Burton Scholarship was established through the generosity of Dean and Mrs. Bruce Burton to assist academically worthy engineering students with financial need. A preference is given to mechanical engineering majors.

•The C. "Larry" and Joyce Busch Engineering Resource Fund was established by Charles Lawrence, BSEE 1963, and Joyce D., BA 1967, Busch to have a direct positive impact on engineering students attending Ohio Northern University. The fund is for the sole purpose of purchasing course materials, including textbooks and/or any other material required in the pursuit of a non-elective engineering curriculum course.

•The C. "Larry" and Joyce Busch Engineering Course Resource Fund was established by Charles Lawrence, BSEE 1963, and Joyce D., BA 1967, Busch to have a direct positive impact on engineering students attending Ohio Northern University. The fund is for the sole purpose of purchasing course materials, including textbooks and/or any other material, required in the pursuit of a non-elective engineering curriculum course.

•The Ivor S. and Ethel E. Campbell Merit Scholarship was established anonymously in memory of Mr. Campbell, BSCE 1916, D.Eng. 1972, and Mrs. Campbell, AA 1917. Scholarship is to be given annually to four undergraduate students, one in each class. Dr. Campbell was a professor in the College of Engineering, 1921-1937.

•The Ivor S. and Ethel E. Campbell Student Aid Fund was established through the maturation of a part of a trust set up by Dr. Campbell, BSCE 1916, D.Eng. 1972, and Mrs. Campbell, AA 1917. Award is to be made to a qualified undergraduate student with financial need in the College of Engineering. Dr. Campbell was a professor in the College of Engineering, 1921-1937.

•The Case Scholarship in Engineering was established by C. Robert Case, BSCE 1932, and his wife, Barbara, to be awarded to a qualified and needy student who has completed more than one year toward his degree in engineering. Mr. Case was an engineer with the Goodyear Tire and Rubber Company in Akron.

•The David F. and Lucille M. Chambers Scholarship was established by the estate of Lucille M. Chambers. Her husband, David F. Chambers, was a 1922 graduate of the College of Engineering.

•The Jerry R. Churchill Engineering Scholarship was established in 1987 by Mr. Churchill, BSCE 1959, from Lima, Ohio. Mr. Churchill was president of Churchill Construction until his retirement in 1995. The award is to assist students in the College of Engineering.

•The Bruce J. Cleavenger Scholarship was established by the estate of Mrs. Ellen C. Cleavenger to aid engineering students who are partially or wholly self-supporting themselves while attending Ohio Northern University.

- The Harlow H. Crooks Engineering Fund was established by Harlow Crooks, BSEE 1923, and his wife, Melvene.
- The DIFCO, Inc. Scholarship was established through the generosity of Mr. Wayne Westlake, president, and Mr. John Murray, executive vice president of DIFCO, Inc. of Findlay, Ohio. The scholarship is for worthy mechanical engineering students with financial need.
- The Donald E. Dome Scholarship was established by Mrs. Dome and friends of Donald E. Dome, BSEE 1949.
- The Duff Student Aid Fund was established by Raymond E. Duff, BSEE 1922, as a memorial to his wife, Coradell Duff, and to his mother, Anna M. Duff. The award is made to a worthy student with financial need.
- The James K. Dunn Scholarship Fund was established in memory of James K. Dunn, BSCE 1921, by a bequest from the estate of Mrs. Dunn for an engineering student in conformity with university guidelines.
- The G. Walter Eighmy Scholarship was established to provide assistance for third and fourth year civil engineering students with financial need.
- The Engineering Deans' Scholarship was established to honor deans of the Engineering College.
- The Engineering Scholarship was established as a general scholarship fund for engineering students.
- The William J. Feth Scholarship was established through a bequest from Mr. William J. Feth, BSEE 1940, to support a deserving student specializing in electronics or the electrical field in the College of Engineering; second choice would be a deserving student in the College of Engineering
- The Fisher Student Aid Fund was established for a worthy student with financial need by Ernest H. Fisher, BSME 1915, and his wife, Ella A. Fisher, JD 1921.
- The Joseph and Lucille Foster Scholarship was established in the name of Mr. and Mrs. Joseph Foster to provide financial aid for engineering students.
- The Maurice H. Freas Engineering Scholarship was established by a bequest from Mr. Maurice Freas, BSCE 1927, for the purpose of providing engineering scholarships to young men and women of outstanding ability and character, who need financial assistance.
- The Fred Fry Engineering Scholarship was established by Fred Fry, BSChE 1933.
- The Leona and Andrew C. Griffing Scholarship was established for engineering students with financial need and above average ability by A.C. Griffing, BS 1912, in memory of his wife.
- The Wayne A. Hamilton, PE, Civil Engineering Scholarship Fund was established with a gift from Wayne A. Hamilton, BSCE 1958, from Orono, Maine. This scholarship shall be used to provide scholarship assistance for sophomore, junior and/or senior students who are majoring in civil engineering.
- The Wayne A. Hamilton, PE, Civil Engineering Scholarship was established with a gift from Wayne A. Hamilton, BSCE 1958, from Orono, ME. This scholarship shall be used to provide scholarship assistance for sophomore, junior and/or senior students majoring in civil engineering.
- The William J. Hazeltine Fund was established in his memory by his wife, Thurza D. Hazeltine, for engineering students.
- The Lee R. Henning Financial Aid Fund was provided as an appropriate memorial by Mr. Lee R. Henning, BSCE 1922, and his wife, Mildred Lowman Henning. It is given to a civil engineering student who is worthy and qualified.
- The James Herendeen Engineering Scholarship was established by James H. Herendeen, BSCE 1929, and his wife, Mary. Each year the income from this endowed fund is to be given to a deserving student in the College of Engineering.
- The Ken Hoag Scholarship was established by Mr. Ken Hoag of San Jose, CA. The award is to go to a "well-rounded" student studying electrical engineering.
- The Henry C. and Marjorie L. Hollinger Scholarship was established by Mrs. Marjorie Hollinger and son, Bruce, for a deserving student(s) in the engineering college from the Lima, Ohio area.
- The Professor Henry and Mary Horltd Scholarship was established by former students, friends and alumni in honor of Professor Horltd and in memory of his wife, Mary, for qualified engineering students. Dr. Horltd was professor of mechanical engineering from 1958-72.
- The Johnston - Jansen Scholarship is provided for engineering students by Mrs. Pansy V. Jansen in memory of her father, Charles Wesley Johnston, who attended ONU, and her husband, T. Carl Jansen.
- The James L. Klingenberger Scholarship was established by former students, friends, and colleagues to honor Professor Klingenberger, BSEE 1949, A. Cit. 1982, D. Engr. 1995, Professor at ONU, 1949-1994.
- The Austin E. Knowlton Memorial Endowed Scholarship was established by the Austin E. Knowlton Foundation in honor of Austin E. Knowlton, whose construction company built several University buildings. Scholarships will be awarded, one for each \$100,000 of endowment principal with recipients limited to Ohio Northern engineering students including one incoming freshman, who are deemed worthy of financial assistance with preference to residents of Logan County, Ohio.
- The Robert H. Lee Scholarship in Engineering was given by Mr. Lee in memory of his mother and is awarded to a freshman engineering student from Seneca County.
- The Lima Society of Professional Engineers Scholarship is awarded in accordance with university financial aid policy.
- The Ralph E. Long Scholarship Fund was established through the will of Ralph E. Long, BSEE 1920.
- The Robert J. Lyman Memorial Scholarship, awarded to a qualified civil engineering student, was established in memory of Robert J. Lyman, BSCE 1941, by his friends at the Prestressed Concrete Institute.
- The LeRoy H. Lytle Award is made available to a worthy engineering student.
- The Capital Leadership Award was established through a gift from the Hon. Cheryl L. (McCain) Mason, BA '86 and Lt. Col. (Ret.) Brett S. Mason, BSEE '86 to provide financial support in the form of student grants to ONU students enrolled in the Getty College of Arts & Sciences or the T.J. Smull College of Engineering who have secured an internship position in the Washington, D.C. area.
- The Howard D. McKinley Scholarship Fund was established in 1985 by Mrs. Eloise H. McKinley in memory of her husband, Howard, BSChE 1930, for deserving engineering students.
- The Robert B. and Frances Eileen Mertz Scholarship was established by a bequest from Frances E. Mertz, who received a teaching degree from Ohio Northern in 1931. Her husband, Robert B. Mertz graduated in 1930 with a BSEE degree. Income from the fund is to assist academically worthy engineering students with financial need. A preference is given for electrical engineering majors.
- The Mikel Messick Scholarship was established by Mrs. Linda Messick in honor of her husband. It is awarded to engineering students with financial need from Allen, Auglaize and Hardin counties of Ohio.
- The MetoKote Corporation Scholarship was established to provide scholarship assistance to students in the College of Engineering.
- The Morgan Foundation Scholarship, for a qualified civil engineering student from Butler, Montgomery, Preble or Warren Counties, was established by B.D. Morgan & Co. of Middletown.
- The Morrison Student Aid Fund, awarded to engineering students with financial need, was established through the will of Mrs. Agatha A. Morrison, CE 1910.
- The William F.D. Neiheiser Scholarship was established by the Reliance Mechanical Corporation of Cleveland, William F.D. Neiheiser, BSME 1942, Chairman. Mr. Neiheiser was a member of the University Board of Trustees from 1977-87 and a former member of the College of Engineering Advisory Board. The lake at fraternity circle is named for Mr. Neiheiser.
- The Warder and Mary B. Page Engineering Scholarship Fund was established as a gift annuity by alumnus Warder Page, BSCE 1922, for a deserving student in the College of Engineering.

•The Dr. Donald S. Pearson Scholarship Fund was established in his honor as Professor of Electrical Engineering at the University. Scholarship is awarded to a qualified, deserving student in the T.J. Smull College of Engineering.

•The Paul H. Reid Engineering Scholarship is given to a worthy and qualified student with financial need by Paul H. Reid, BSME 1912, and his wife, Mildred G. Reid.

•The Harold E. Remsburg Scholarship is provided to an engineering student who is pursuing a career in public service work. The scholarship was provided by Mr. and Mrs. Harold Remsburg. Mr. Remsburg received the BSCE degree in 1949.

•The Singleton Remsburg Memorial was established by Mr. and Mrs. Harold Remsburg in memory of their son, Singleton, BSEE 1977, to fund an annual "Creativity Award."

•The Captain William D. Robinson Scholarship was established by Alice Ruth Robinson as a memorial to her husband, Captain William D. "Cap" Robinson, BSCE 1916, for an engineering student in accordance with university financial aid policy.

•The Samrad Engineering Scholarship Fund was established for students by Dr. Cyrus Samrad, BSCE 1957, in compliance with university financial aid policy.

•The John S. Sawvel, Sr. Scholarship Fund was established by Mr. Sawvel through the maturation of a trust, for qualified students in the College of Engineering. Mr. Sawvel, friend of the University, was a registered engineer whose company represented numerous municipalities in their rate negotiations with public utilities serving the municipalities.

•The William H. and Elizabeth Schaum Financial Aid Fund was established by William, BSCE 1923, D ENGR 1976 and his wife, Elizabeth to give future students of Ohio Northern University the opportunity for a unique educational experience. The award is given to worthy students in the College of Engineering.

•The John Edward Seman Scholarship was established in his loving memory by his parents, David A. and Lisabeth M. Seman and brothers, Steven and Daniel of Findlay, Ohio. The scholarship recipient will be limited to an Ohio Northern University student in his/her senior year majoring in Civil Engineering and who is the highest ranking student in the class eligible for scholarship awards. In the event there are two or more students with the same GPA then the scholarship shall be awarded to the student deemed most worthy of financial assistance as judged by appropriate University officials.

•The Sholl Student Competition Fund has been established by a bequest from the estate of June W. Sholl. The endowment fund is in honor of William E. (xBSCE 1933) and June W. Sholl to assist students with design competition costs and to fund support of student academic activities.

•The William E. and June W. Sholl Scholarship Fund was established by a bequest from Mrs. Sholl to assist worthy students in the Smull College of Engineering.

•The T.J. Smull Memorial Engineering Scholarship was established by Mr. and Mrs. Morrell H. Blesh. The award will be given annually to a qualified engineering student, with preference to applicants with a physical handicap. Dr. Smull was dean of the Engineering College from 1905-1918.

•The Floyd D. Spar Scholarship. Established in memory of Floyd D. Spar, BSChE 1936, from his estate and family. The scholarship is awarded annually with preference given to a student from Ada High School enrolled in the College of Engineering.

•The Stimmel Financial Aid Fund, established by Clayton H. Stimmel, BSCE 1960, and his wife, Harriett, is awarded to a civil engineering student with exceptional motivation, moral integrity and financial need.

•The Sundstrand Corporation Scholarship was established by Sundstrand Corporation to be awarded annually to qualified, deserving students majoring in electrical engineering.

•The Taylor Aid Fund is given to a worthy engineering student with financial need in memory of Willard Thompson Taylor, ME 1930, by his sister and brother-in-law, Frances and Park D. Rogers.

•The Alton D. Taylor Student Aid Fund was established by Mrs. Alton D. Taylor in memory of her husband, Professor Alton D. Taylor, who served on the civil engineering faculty from 1954 until his death in October 1959. The award is made available to a worthy student with financial need.

•The Thevenet Scholarship is awarded to a qualified student with financial need by Edward H. Thevenet, BSCE 1916, and his wife, Grace.

•The Joseph E. and Dorothy Turney Student Aid Fund was established by a bequest from Joseph E. Turney, BSCE 1949, to make annual awards to needy and deserving students in the College of Engineering.

•The Charles I. Van Dusen Memorial Scholarship was established by Nelva E. Van Dusen in memory of her husband, Charles, and in honor of her grandson, Elliott M. Metzger, BSCPE 2003. Income from the fund will be awarded to a computer/electrical engineering student(s), who have at least a 3.00 GPA or above with a sincere commitment to the field of computer/electrical engineering, an outstanding work ethic and a high standard of personal integrity and character.

•The Clarence and Dorothy Walker Engineering Student Aid Fund was established through a bequest from Clarence, BSEE 1921, and Dorothy Walker of Zephyrhills, FL. Scholarship recipients will be limited to Ohio Northern University students who are deemed worthy of financial assistance and are enrolled in the College of Engineering.

•The Wander Scholarship Fund was established by Ronald W. (Soc) Wander, BSCE 1924 and his wife Shirley. The annual income from the endowed fund will be used to assist worthy students with financial need in the College of Engineering. Preference will be given to students majoring in civil engineering.

•The Miller H. Ward Memorial Scholarship is to be awarded annually to a needy student or students majoring in the study of engineering science.

•The Victor and LaDona (Church) Wellman Scholarship Fund was established to assist one student in the College of Arts & Sciences and one student in the College of Engineering.

•The Thomas W. Westerbeck Electrical Engineering Scholarship was established by his parents, Wilson A. and Ethel B. Westerbeck, in honor of their son, Thomas, BSEE 1969. The scholarship is to be awarded to junior or senior electrical engineering students who are involved in the Co-op program.

•The B. David and Mabel Williams and Ernest L. and Evelyn Dustman Scholarship was established by Mr. and Mrs. David J. Williams in honor of the memory of their parents. The scholarship is for worthy students in the College of Engineering.

•The Mete Yalcin Engineering Scholarship was established through the generosity of Mr. Mete Yalcin to assist academically worthy engineering students with financial need.

•The Roger R. and Sarah Lee Brown Engineering Scholarship was established with a bequest from the estate of Roger, BSEE 1963 and his wife Sarah Lee Brown of Sunbury, Ohio. Scholarship recipients will be limited to Ohio Northern University students, including incoming freshmen, who are deemed worthy of financial assistance, are engineering students, have at least a 3.0 GPA and are Christians aspiring to high moral and spiritual standards.

Pharmacy Scholarships

•The Alpha Zeta Omega, Bill and Betty Klein Scholarship was established by the Alpha Zeta Omega, Theta Chapter in 2005. The scholarship is to be awarded to students deemed worthy of financial assistance in the College of Pharmacy.

•The Albert T. Awad Award for Immunology was established by Dr. Albert Awad for a fourth year pharmacy student who will pursue at least a master's degree after graduation and who has excelled in immunology class in his/her third year of pharmacy.

•The Rollin E. and Margaret L. Ballentine Pharmacy Scholarship was established through the estate of Margaret L. Ballentine in memory of her husband, Rollin, BSPH 1952, and her father, Bertrand R. Higgins, PH G 1911. The income from the fund will be awarded to students enrolled in the College of Pharmacy.

- The Cardinal Health Endowed Scholarship Fund was established by Cardinal Health in 2011. The scholarship will be awarded to academically eligible Ohio Northern University pharmacy students who have shown interest in practicing in a community pharmacy/independent pharmacy operation setting.
- The Classes of 1968/69/70 Scholarship was established by the Pharmacy College Classes of 1968, 1969, and 1970 to provide funds for a student in the College of Pharmacy.
- The CVS Scholarship was established to provide funds for a student in the College of Pharmacy.
- The Dr. Leasure Kline Darbaker Scholarship Award is presented to pharmacy students with financial need.
- The John W. Dargavel Foundation Scholarships are sponsored by the National Association of Retail Druggists.
- The Forrest P. and Robert A. Daum Pharmacy Scholarship was established in 2006 from the estate of Paul A. Daum of Akron, Ohio, to honor the memory of his father, Forrest P., Ph G 1923, and his brother, Robert A., BSPH 1961. The award will be granted through the normal practices and procedures by the University Financial Aid Office.
- The Duran Family Endowed Fund for Pharmacy Skills Enrichment was established by Donald E. Duran, Jr., BSPH 1985, to help current and future Ohio Northern University pharmacy students in their educational endeavors. The fund will be used by the Raabe College of Pharmacy by providing increased classroom and experimental learning opportunities to pharmacy students in the long-term care pharmacy practice settings and increase opportunities for experimental learning and overall assistance to pharmacy students residing in Northeastern Ohio and Western Pennsylvania.
- The Cloyce M. (PhG 1929) and Aretha R. Durliat Scholarship was established by Mr. and Mrs. Cloyce M. Durliat.
- The Eckerd Drug Company Scholarship is awarded to a third, fourth, or fifth-year pharmacy student planning a community pharmacy career.
- The Thomas J. Evans (PhG 1894) Memorial is awarded to qualified students from Licking County.
- The Waldo B. Finney Scholarship was established by a bequest from Margaret R. Finney to honor her father, Waldo, a 1918 pharmacy graduate.
- The Fischelis Scholarship Fund is given to qualified students in concert with university financial aid policy by gifts from the estate of Dr. Robert P. Fischelis and appreciative alumni and friends. Dr. Fischelis was Dean of the College of Pharmacy, 1963-66.
- The Roland R. Foley Scholarship Fund was established in 1985 by the will of Roland R. Foley, BS 1912 and BSPH 1912, for students in the arts and sciences and pharmacy colleges.
- The Gahm Family Endowed Scholarship Fund was established by Mr. Troy Gahm, BSPH 1992, President of Gahm's Family of Businesses, including Gahm's Pharmacy. The scholarship will be awarded annually to a deserving student with financial need attending the Raabe College of Pharmacy that resides in the Lucasville or Scioto County area.
- The Garrett Scholarship Fund was established in 1998 by Mr. Gary Garrett, BSPH 1969. The award is to go to a deserving student preferably from western Pennsylvania, enrolled in the College of Pharmacy. The student must also have attained P3 status with at least a 3.00 GPA. The scholarship may be continued through graduation.
- The Good Neighbor Pharmacy Scholarship was established by Ameri-sourceBergen Drug Corporation. Scholarship recipients must be a P3 or P4, have interest in practicing in the community pharmacy retail setting, submit a reference letter from a local community or independent pharmacist, a member of the student NCPA organization and preference will be given to applicants who have worked or are currently employed at an independently owned Good Neighbor Pharmacy.
- The Thomas A. and Phyllis J. Gossel Scholarship Fund is awarded to students enrolled in the College of Pharmacy, based on financial need and the recommendation of the dean of the college.
- The Richard Lynn Green Memorial Award is provided through an endowment established by Mr. and Mrs. Richard Clark Green, family and friends.
- The J. Richard Grunder Pharmacy Scholarship was established through a trust by J. Richard Grunder, BSPH 1959, of Norman, Oklahoma. The scholarship will provide student aid to academically eligible pharmacy students with demonstrated financial need.
- The Meredith and Geraldine Guider Scholarship is awarded to a third, fourth or fifth-year pharmacy student.
- The Hakes Memorial Scholarship is awarded to a qualified and worthy student with financial need by Vern H. Hakes, PhC 1933, and his wife Evie. Established in memory of their late son, Robert H. Hakes, BSPH 1955.
- The Emory M. Hall Endowed Scholarship was established by Emory M. Hall, BSPH 1956. The scholarship recipients will be limited to Ohio Northern University students who are 5th or 6th year students in the College of Pharmacy, who are deemed worthy of financial assistance and are citizens of the United States.
- The Harry Lee Hamsher Scholarship was established through the general pharmacy memorial endowment fund by faculty of the College of Pharmacy, alumni, and friends of Mr. Hamsher, BSPH 1918, who was Professor of Pharmacology from 1920-1939.
- The Edwin C. and Kathryn C. Hart Endowed Scholarship Fund was established by Mr., BSPH 1942, and Mrs. Hart, and shall be awarded on academic ability, without regard to financial need, to a student whose elementary and/or secondary education was primarily obtained as a resident of Carroll or Stark counties of Ohio, and is a full-time student in the College of Pharmacy.
- The Anne E. Hartford and James E. Hartford Scholarship, established by the estate of Anne E. Hartford, provides tuition money for pharmacy students. Mr. Hartford's father, uncle, and two cousins graduated from the ONU College of Pharmacy.
- The George and Beatrice Hawkey Endowed Fund, in memory of Dean Rudolph Raabe, was established by the Hawkey Family Foundation. The scholarship will be awarded to students, including incoming freshmen, who are deemed worthy of financial assistance, graduated from a school in Putnam County, Ohio and are enrolled in the College of Pharmacy.
- The Dr. Metta Lou Henderson Fund for Recognition of Pharmacy Student Leaders was established through a gift by Dr. Metta Lou Henderson, Honorary DPharm 2008, a faculty member from 1978 to 1998 at Ohio Northern University. The fund will be used to assist pharmacy students in defraying the cost of their education or the cost of attending National Pharmacy conferences. Recipients should exhibit strong leadership characteristics by serving as role models and mentors for other students. A leader is an individual who guides others or takes the initiative and does not necessarily serve as an officer of an organization. The designation allocation will be determined at the discretion of the Dean of the Raabe College of Pharmacy.
- The Gayle Huet-Musser Endowed Scholarship Fund was established as a memorial by family and friends of Gayle Huet-Musser, BSPH 1980, who died of cancer in 2004. The recipient must be a female who is pursuing a degree in pharmacy and has lived within a 50 mile radius of Pittsburgh, PA, during their senior year of high school.
- The Courtney Ann Jones Scholarship was established by her father, Dr. Ronald J. Jones, retired professor of clinical pharmacy at Ohio Northern University. The scholarship will be awarded annually to a student with financial need seeking a career in pharmacy or science to honor the memory of Courtney, who passed away suddenly in December, 2003.
- The Kmart Endowed Scholarship is awarded annually to a student in their 3rd, 4th, or 5th year and currently employed in community pharmacy.
- The Kroger Foundation Scholarship is to be awarded to a third, fourth or fifth-year pharmacy student planning a retail practice of pharmacy.
- The Dr. Charles Oren Lee Award was provided through an endowment established by Dr. C. O. Lee.
- The Joseph E. Marmon Memorial Scholarship was established by Dr. Marmon's widow, Margaret, family, friends, and alumni in memory of Joseph E. Marmon, BSPH 1938, D.Sc. 1970. Awarded to deserving pharmacy students. Dr. Marmon was a trustee of the University from 1961-81.
- The McElroy - McCleery Student Aid Fund was established by Mrs. Ethel McElroy McCleery, BSEd 1917, in memory of her husband, Charles D. McCleery, PhG 1917, for students with exceptional ability who also have financial need.

- The Charles McCleery and Ethel M. McCleery Scholarship Fund was established from the estate of Ethel M. McCleery with preference given to graduates of Fairfield County high schools.
- The McCurdy Fund was established with gifts from alumni and friends to honor the retirement of Dr. Robert McCurdy, BSPH 1965, Hon. D Pharm 1996, and his service to the Raabe College of Pharmacy, Ohio Northern University and the profession of pharmacy. The award will be presented to a P-5 student in the College of Pharmacy for use during their P-6 school year.
- The Medco Health Solutions Pharmacy Scholarship was established by Medco Health Solutions in 2009. The award will be presented to an academically eligible pharmacy student with financial need.
- The Meijer, Inc. Scholarship is awarded to an upper division pharmacy student planning a retail practice of pharmacy.
- The Walter H. Meyer Scholarship is awarded to students without regard to financial need by Mrs. Glenna Schafer Meyer, AA 1933, in memory of her husband, Walter H. Meyer, PhC 1933. Scholarship is awarded to students without regard to financial need in the College of Pharmacy.
- The Roy B. Odenkirk Scholarship was established in memory of Mr. Odenkirk, PhG 1925, a well-known pharmacist, drugstore owner and businessman in Sugarcreek, Ohio.
- The Pharmacy Scholarship was established to provide funds for a student in the College of Pharmacy.
- The Phar-Mor and Victor LaMarco Scholarship is presented to third, fourth or fifth-year pharmacy students, who have financial need and plan to enter the retail practice of pharmacy.
- The Dr. Clarence H. Pierstorf Scholarship was established by Dr. Clarence H. Pierstorf for a student in the College of Pharmacy.
- The Dr. and Mrs. Ervin W. Pierstorf Scholarship was established by a gift from the Pierstorfs for a worthy student in the College of Pharmacy.
- The Harold Resnick Scholarship is awarded to a qualified pharmacy student.
- The R. Larry Richey Memorial Scholarship was established by the estate of Mr. Richey, BSPH 1959. It is awarded to deserving students in the College of Pharmacy.
- The Rite Aid Scholarship is to be awarded to a deserving student to complete the final year of pharmacy school.
- The Dr. Julius Rogoff Foundation Award is presented to an outstanding student.
- The Carol C. Roy Memorial Scholarship was established by the Class of 1975 in memory of their classmate, Carol C. Roy. The award is given to a third, fourth, or fifth-year student with both financial need and good academic standing.
- The Janet and Albert Sebok Scholarship award is given annually to a pharmacy student in their last three years of study and is also a member of Kappa Psi Fraternity.
- The L.C. Slesman Scholarship was established through the general pharmacy memorial endowment fund by faculty of the College of Pharmacy, alumni, and friends of Mr. Slesman, PhG 1905, who was Professor of Chemistry and Organic Chemistry from 1905-1930.
- The Bernard Smarsley Scholarship was established by the Smarsley family in memory of Bernard Smarsley, BSPH 1953, for a qualified and deserving student.
- The Dr. A.C. Smith Memorial Award is presented to a fourth-year pharmacy student with an excellent academic record by the family and friends of Dr. Smith to commemorate his many years of dedicated service to the Raabe College of Pharmacy.
- The Robert M. Storch Pharmacy Scholarship was established by friends and family of Robert M. Storch, BSPH 1968, at his untimely death in 2009. The award will go to a student attending the College of Pharmacy with financial need.
- The Charles G. Schwartz, Sr., PhG 1897, Scholarship was established from personal and family gifts for pharmacy students from the Pittsburgh area.
- The Turner Family Endowed Fund in support of Pharmacy Student Organizations and Community Service was established by friends and family of Mary Ann (Gardner) Turner, BSPH 1963, as a tribute to her memory after her death in August, 2009. The income from the fund will be used to support pharmacy student organizations and community service.
- The Walgreen Endowed Scholarship is awarded annually to a student planning community pharmacy practice.
- The Walkup Endowed Fund for Excellence in the Practice of Pharmacy Compounding was created by Michelle (Smith) Walkup, BSPH 1992, and her husband, Kenny R. Walkup, Jr., BSPH 1992, in 2009. The fund will be used at the discretion of The Raabe College of Pharmacy to assist pharmacy students in developing their compounding skills to serve the public and the profession.
- The scholarship recipients of the Walmart and Sam's Club Endowed Leadership Scholarship Fund will be awarded to academically eligible Ohio Northern University Pharmacy students entering their 4th, 5th, or 6th year of pharmacy studies who have demonstrated leadership in pharmacy specific and/or ONU student organizations and have shown interest in community pharmacy.
- The Dana and Gladys B. Welsh Scholarship Award was established by a bequest from the will of Gladys Blair Welsh.
- The Virgil J. "Tom" Wiechart Memorial Fund was established by the Drug Emporium Foundation, David L. Kriegel, Trustee, in memory of Mr. Wiechart, BSpH 1950, A.Cit. 1978. Mr. Wiechart was President of Wiechart Pharmacies, Lima, Ohio.
- The Volney L. Wright Scholarship was established by a bequest from Mr. Wright, PhC 1932, for a qualified student in the College of Pharmacy. Preference to be given to a student with financial need from one of the several counties in Ohio, which are Wood, Sandusky, Erie, Seneca, Huron, Auglaize, or Logan. Mr. Wright was, for many years, a pharmacist in Bowling Green.
- The Dr. Charles (Chuck) L. Johnson Memorial Fund is a scholarship endowment will honor the memory of Dr. Charles (Chuck) L. Johnson, Professor of Communications Arts Emeritus. It will benefit students within the College of Arts & Sciences departments of Communication and Media Studies and Theatre Arts.

Law Scholarships

- The Frank J. Aimutis Scholarship was established in memory of Mr. Aimutis, BSEE 1917, by his wife, Neva Thomas Aimutis, AA 1920, to assist students majoring in engineering or law.
- The Judge Anthony A. Alaimo Scholarship Fund was established to honor Judge Anthony A. Alaimo, Class of 1940, by friends W. C. Killgallon and J. W. McSwiney. Judge Alaimo was a Senior Federal Judge for the South District Court of Georgia. The scholarship will be awarded to a student with a demonstrated work ethic and a strong academic background or high academic potential. Holder of the scholarship will be required to maintain a 3.25 G.P.A.
- The H.E. Ashcraft Memorial Grants are awarded to law students with financial need.
- The Albert A. Baillis Scholarship was established by alumni, faculty and friends to honor Professor Albert A. Baillis, professor of law from 1957 to 1991. The award is made in accordance with university policy with preference given to an Ohio resident.
- The Bashor - Yinger Financial Aid Fund was established by Dr. Mary B. Yinger, D.O., as a memorial to her husband, Dr. Elmer L. Yinger, D.O. The award is made to a qualified and worthy student with financial need.
- The John E. Bauknecht Scholarship Fund was established by John E. Bauknecht, JD 1922, of East Palestine, Ohio, for students with both high academic ability and financial need.
- The Dr. John E. Beard III Memorial scholarship was established in 2003 by friends, colleagues and family members as a memorial to Jack. The scholarship is to assist deserving students in the College of Law. John E. "Jack" Beard III, BA 1969, JD 1972, was a member of the board of trustees at Ohio Northern University and a prominent Pittsburgh, PA., attorney when he died at the age of 55 in 2003.

- The Peter B. Betras Law Scholarship was established in memory of Dr. Betras, JD 1928, by his friends, Mr. Anthony G. Rossi and Mr. Anthony G. Rossi III, JD 1991, attorneys in Warren, Ohio. The award is to go to a qualified student in the Pettit College of Law. Dr. Betras was a well-known Youngstown attorney.
- The William H. Blackford Award was presented by Mr. and Mrs. W. Vincent Rakestraw in honor of Mrs. Rakestraw's father, William H. Blackford, JD 1936.
- The Judge Blase A. Bonapane Scholarship is given to a worthy student with demonstrated financial need.
- The Dr. George D. and Evelyn B. Brabson Scholarship was established by Dr. and Mrs. Brabson for a law student with outstanding academic scholarship.
- The Benjamin Brafman Scholarship is awarded each year to an eligible second year Jewish law student who is a member of the Ohio Northern University Cardozo Jewish Law Student Association. This scholarship is made possible by a gift from Mr. Benjamin Brafman, a 1974 graduate of the Pettit College of Law.
- The William J. Brown Memorial Scholarship was established by friends and colleagues to honor the memory of Mr. Brown, JD 1967, LLD 1980, and to support a student generously by providing distinctive opportunities for learning the law, and to cultivate a culture of sophistication and high aspirations in the College of Law through the collective qualities of William J. Brown Scholars. Bill Brown was the youngest man elected to the position of Ohio Attorney General and the longest to serve in office, from 1971-1983. He was a senior partner in the firm of Kegler, Brown, Hill & Ritter, taught at Franklin and Ohio Northern Universities and was active in numerous charitable, civic, professional and political organizations.
- The William James and Millicent Burgess Scholarship was established by Rhett William, JD 1979, and Carol Sue Burgess of Leo, IN, to establish a memorial to the love and devotion between his parents, William James and Millicent Marie Burgess. Scholarship awards will be made for a full academic year and may be renewed annually on the basis of satisfactory progress toward graduation from Ohio Northern University's Claude W. Pettit College of Law. The recipient of this scholarship must be a current member of any branch or unit of the United States military forces, or a son or daughter, provided such member or veteran has successfully completed the United States Army's Airborne School and earned his/her United States Army Parachutist Badge—commonly referred to as “Jump Wings”. Should no student qualify, then all or part of the fiscal distribution from the fund, may be used for scholarship awards to any second or third year law students.
- The Erwin L. and Effie Clemens Scholarship Fund was established in 2001 through a bequest from the estate of Erwin L. Clemens, JD '34, Hon. D. '81, of Defiance, Ohio. The endowment supports scholarships to second- and third-year law students whose academic performance is superior but whose financial need is so great that their continued study of law might be at risk without substantial scholarship assistance. A distinguished attorney and 1934 graduate of the College of Law, Clemens' interest in the fund was stimulated by his own struggle over several years during the Great Depression to pay for the legal education that defined his ambitions and his life's work. Beginning in 1967 and continuing until his death in 1999, Clemens served as a University trustee. During his tenure, he played a leadership role in two fundraising campaigns for the College of Law.
- The George Ray Craig Scholarship was established by Mrs. Janet E. Henderson to honor the memory of her father, George Ray Craig, BS 1888, for law students selected in accordance with law college financial aid policy.
- The Harvey and Marilyn Creighton Law Scholarship was established through a bequest by Mrs. Marilyn E. Creighton of Canton, Ohio, as a memorial for her husband, Dr. Harvey H. Creighton, LLB 1928, Hon. LLD 1976. Dr. Creighton was a partner in the Canton law firm of Creighton and Sickafoose for 58 years. The award will go to a worthy student demonstrating financial need, pursuing a degree in law.
- The Ella A. Fisher Student Aid Fund was established by Ernest H. Fisher, BSME 1915, and his wife, Ella A. Fisher, JD 1921, for a worthy student with financial need.
- The Murray Flom Memorial Fund was established by the parents and friends of Murray Flom, a student in the College of Law who died in 1974. Annual income from the fund shall go to a qualified second or third year student with financial need from the College of Law. Preference shall be given to a Jewish student.
- The William Clark Foster Scholarship was established by the estate of William Clark Foster, JD 1941, for worthy students of the Claude W. Pettit College of Law, entering or continuing, who have excellent academic credentials represented by approximately a “B” average.
- The John H. Genovese Law Scholarship was established by John H. Genovese, JD 1979, of Coral Gables, FL. Income from the fund will provide scholarships for worthy Ohio Northern University law students.
- The Daniel and Eleanor B. Guy Scholarship was established by Daniel, JD 1952, professor of law, and his wife, Eleanor Guy. Dr. Guy retired in 1998. He joined the faculty in 1959 and was dean of the College of Law from 1978 to 1983. The scholarship is to be awarded annually to a second or third year Ohio Northern University law student in good standing academically and in need of financial assistance.
- The Eugene N. Hanson Fellows & Scholarship Fund was established to honor Dr. Eugene Hanson, LL. D. 1986, Professor of Law from 1947-84, and Dean of the College of Law from 1958-73. The Annex to the Law Library is named in honor of Dean Hanson.
- The David C. and Edna L. Haynes Memorial Scholarship Fund was established by David C. Haynes through a will bequest. Mr. Haynes attended ONU for two years and earned his LLB in 1926. The income from the fund shall be used for tuition, room and board, and books for students attending the College of Law without regard to race, creed, ethnic background, sex or religious preference.
- The Margaret Schwartz Hodges Memorial Scholarship Fund is provided to deserving students through the will of Margaret Schwartz Hodges, a friend of the Pettit College of Law from Findlay, Ohio.
- The Jerome L. and Margery Holub Scholarship was established by Jerome L. Holub, JD 1951, of Akron, for a qualified student in the Pettit College of Law.
- The John A. L. Hughes Memorial was established in 1970 in memory of John Hughes for a worthy law student with financial need.
- The Carl Frederick, Clara E. Berry Klein and Robert W. Summers, M.D. Scholarship. Established by Mrs. Mariann Klein Summers of Canton in memory of her parents and husband. Mr. Klein, LLB 1925, practiced law many years in Canton and was at one time mayor of the city. Dr. Summers practiced medicine in Canton for many years.
- The Robert and Lola Koch Student Aid Fund for the College of Law was established by C. Robert Koch, JD 1941, A. Cit. 1986.
- The Lacey Law Scholarship was established by the estate of Zelma C. Lacey, in memory of William H. Guyton, Sr., and William H. Guyton, Jr., for a worthy student.
- The Law Alumni Scholarship is a general scholarship for law students, established by alumni and friends.
- The Law Class of 1964 Scholarship was established by the Law College Class of 1964 to provide funds for a student in the College of Law.
- The Law College Scholarship was established to provide funds for a student in the College of Law.
- The Law Deans' Scholarship was established by alumni and friends over the years to honor deans of the law school.
- The August J. and Ruth P. Leagre Memorial Fund was established by Mr. and Mrs. Richard M. Leagre of Indianapolis, Indiana, in memory of his parents. Richard Leagre received the BA degree in 1959.
- The Levi W. and Nancy N. Lile Endowed Scholarship was established in 2006 by Laird A. Lile, JD 1984 and family to honor his parents, Levi, JD 1972 and Nancy Lile of Bellefontaine, Ohio. Scholarship recipients will be limited to Ohio Northern University law students, including entering 1st year law students, who are deemed worthy of financial assistance as judged by appropriate College of Law officials. Special preference will be given to students who are Ohio residents, married with children, embarking upon a second career in the law.
- The John C. Markey Charitable Trust Scholarship was established by the Markey Charitable Trust of Bryan for a qualified student in the Pettit College of Law.

•The Marsh Scholarship Fund was established by John Marsh, Jr., JD 1934, and his wife, Mary C. Marsh, for students with demonstrated ability and financial need.

•The Dr. and Mrs. Julius Matz Scholarship Fund awards a scholarship to a College of Law student without regard to financial need.

•The Harold J. and Irene G. Meredith Scholarship Fund was established by Harold J., JD 1925, and Irene G., AA 1925, Meredith of Lima, Ohio. The income is used to provide assistance to highly qualified students in the College of Law who require financial assistance and whose moral standards reflect those of the University. Dr. Meredith was a trustee of the University from 1957-1984, and a former President of the Board of Trustees.

•The Evan W. Morris Law Scholarship was established by Evan M. Morris, JD 1965, in memory of his father, Evan W. Morris, a well-known Alliance, Ohio attorney.

•The Robin R. Obetz Scholarship was established through the generosity of Dr. Robin Obetz to assist academically worthy students with financial need.

•The Claude W. Pettit Memorial Fund was established by his friends in memory of the late Dean of the College of Law, Claude W. Pettit.

•The Rutter - Taggart Scholarship is awarded to a student with both high scholastic ability and financial need.

•The Carroll E. Sammetinger Law Scholarship was established by Audrey Sammetinger, in memory of her husband, Carroll, JD 1949. The award will go to a worthy student in the College of Law with financial need.

•The John S. Stuckey Scholarship Fund is awarded to a worthy third-year student in memory of John S. Stuckey, JD 1953, by his family and friends.

•The Mary S. Wetherill Scholarship Fund was established by her estate for students in the College of Law.

•The Walter L. and Helen W. White Law Scholarship was established by Walter L. White, BA 1941, JD 1948, Alum Cit. 1994, Honorary Doctor of Law 2000, as a memorial to his wife, Helen. The scholarship is to be awarded annually to a student with financial need and deserving a quality education from the Claude W. Pettit College of Law.

•The Frank B. Willis Memorial Student Aid Fund provides assistance to an Ohio resident in good academic standing with financial need. The award is made in recognition of Frank B. Willis, law faculty member, U.S. Congressman, Ohio Governor and United States Senator, and was established through the will of his only child, Miss Helen Willis.

•The Leander P. Zwick III Scholarship was established by Dr. Leander P. "Pepper" Zwick III, JD 1975, of Canton, Ohio, for qualified students in the College of Law.

•The Monsignor Francis X. Schweitzer Service Award: Donald Beran (JD '64) and Mary Helen Beran have made possible an endowed scholarship in memory of the late Monsignor Francis X. Schweitzer. A student will be selected annually at the discretion of the dean and by nominations of the law faculty. This award will benefit a student who embodies characteristics of community service to the law school and Ada area.

•The Hon. Frederick D. Pepple Endowed Scholarship Fund is a donor restricted gift to provide financial support to deserving law students attending the Pettit College of Law. The selection policy is determined by completing an application and is determined by the Dean or his designees.

Loan Funds

The following loan funds have been established for loans to students enrolled in all colleges of the University:

GENERAL UNIVERSITY

•University General Loan Fund.

•The Steiner F. and Ollie M. Bauman and Roy H. and Ruth G. Lambert Loan Fund was established through a bequest from Mrs. Lambert, BSEd 1936 as a memorial to her parents, The Bauman's, as well as, for she and her husband, Roy H. Lambert, JD 1937. The fund shall be made available as loans, which are to be repaid, and the fund shall be a revolving, so as to provide the maximum benefit for worthy students.

•The Donald and Erma Holdren Revolving Student Emergency Loan Fund was established through a bequest of Donald D. Holdren, BSCE 1937. The fund shall be made available as loans, which are to be repaid, and the fund shall be revolving, so as to provide the maximum benefit for worthy students.

•The Kerscher Loan Fund was established by Robert, BSBA 1970, and his wife, Barbara Kerscher of Hudson, Ohio. The funds will be used to create low interest loans for ONU students. Bob is president and CEO of Lexi-Comp, a leader in providing clinical content at the point of care. He also has served on the Board of Trustees at Ohio Northern University since 2002.

•The Kathleen C. McIntosh Student Aid Fund; a living memorial to Kathleen Crowder McIntosh, wife of the sixth president of Ohio Northern University by the generosity of her many friends.

•The Charles E. Schell Foundation provides four \$25,000 grants which are to be used for interest-free educational loans to students from Ohio and neighboring states. Loans will be awarded to students in good standing who have demonstrated need. Juniors and seniors will be given preference.

•The Schmidlapp Foundation Loan Fund was established for undergraduate women from Ohio.

•The United Methodist Student Loan Fund. A limited number of worthy students who are members of the United Methodist Church may secure loans from the Student Loan fund administered by the Board of Education of the Church.

ARTS & SCIENCES

•College of Arts & Sciences Loan Fund.

BUSINESS ADMINISTRATION

•College of Business Administration Loan Fund.

•OSCPA Loan Fund.

ENGINEERING

•The Harry B. Raison Engineering Loan Fund, established by Harry B. Raison, BSME 1931, is to provide an additional source of financial assistance (in the form of loan money) to eligible engineering students during their junior or senior year, and also applies to co-op students who would be in their fifth year. The loan fund is administered by the University Financial Aid Office with information furnished by the Dean of the College of Engineering. There must be a demonstrated need to qualify for a loan. This need may be determined by using information from a variety of sources and not limited to the FAF or the needs analysis formula. Students must be currently enrolled and in good academic standing to apply.

PHARMACY

•College of Pharmacy Loan Fund. Established by gifts to the University from various sources, including the family of W. C. Timblin, PhG 1923, Port Clinton, Ohio, the friends of Arthur D. Broa, and the friends of Otto W. Haneberg.

•Richard and Ronald Bonfiglio and George Schertzer Student Loan Fund, established and maintained by Richard and Ronald Bonfiglio.

•The Pierstorf Scholarship Loan Fund, established by Ervin, D.Ph 1978 and Clarence Pierstorf, D.Ph 1990 as a memorial to the Pierstorf family.

LAW

•The Law College Emergency Loan Fund.

•Benefactor's Loan Fund.

•The Earl D. Haefner Loan Fund was established in the memory of her husband by Leona K. Smith to benefit needy law students.

University Faculty

2014-2015

Faculty are listed with position and rank for the 2014-15 academic year. The year refers to the time of initial service to the university.

Ahmed M. Abdel-Mohti, B.S.C.E. (Helwan University), M.S.C.E. (Lawrence Technology University), Ph.D. (University of Nevada), 2009. *Assistant Professor of Civil Engineering*

Eyob D. Adane, B.Pharm., M.S. (Addis Ababa University), Ph.D. (University of Kentucky), 2014. *Assistant Professor of Pharmacy Practice*

Alisa L. Agozzino, B.A. (Ohio Northern), M.A., Ph.D. (Bowling Green), 2007. *Assistant Professor of Communication Arts*

Albert Siaw Akyeampong, B.S. (University of Ghana), M.S. (University of Reading), Ph.D. (Ohio University), 2013. *Assistant Professor of Education*

Catherine Albrecht, B.A., M.A., Ph.D. (Indiana University), 2009. *Professor of History; Dean, College of Arts & Sciences*

Robert M. Alexander, B.A. (Ohio Northern), M.A., Ph.D. (Tennessee), 2002. *Professor of Political Science; Chair, Department of History, Politics and Justice.*

Jeffery Allison, B.S. Pharm., Pharm. D. (Ohio Northern), 1994. *Professor of Pharmacy Practice*

Khalid Al-Olimat, B.S. (Far Eastern U.), M.S. (Bradley), Ph.D. (Toledo), 1999. *Professor of Electrical and Computer Engineering; Chair, Department of Electrical & Computer Engineering and Computer Science*

Nesreen Alsou, B.S., M.S. (Kansas State University), Ph.D. (University of Oklahoma), 2013. *Visiting Assistant Professor of Electrical and Computer Engineering*

Brian D. Anderson, B.A. (Wisconsin), J.D., LL.M. (Ohio Northern), M.L.I.S. (University of Illinois) 2012. *Reference Librarian with rank of Associate Professor in the Law Library.*

Rodney P. Anderson, B.S. (Sioux Falls College), Ph.D. (Univ. of Iowa), 1987. *Professor of Biological Sciences; Chair, Department of Biological and Allied Health Sciences*

Amelia M. Anderson-Wile, B.A. (Hamline University), M.S., Ph.D. (Cornell University), 2010. *Assistant Professor of Chemistry*

Mircea Anghelescu, M.D. (University of Medicine and Pharmacy "Victor Babes"), 2010. *Assistant Professor of Anatomy and Physiology*

Nancy A. Armstrong, A.B. (Vassar), J.D. (Boston College), M.S. (Drexel), 2001. *Director of the Taggart Law Library; Professor of Law*

Amy L. Aulthouse, B.S. (Shippensburg), Ph.D. (South Dakota), 1997. *Professor of Biological Sciences*

Benjamin C. Ayling, II, (B.M., M.M. (Bowling Green), Ph.D. (Ohio State), 2011. *Choral Director and Associate Professor of Music*

Kathleen T. Baril, B.A. (Grinnell College), M.A. (Columbia University), M.A. (University of Iowa), 2010. *Collections and Electronic Resources Librarian with rank of Assistant Professor, Heterick Library*

Charles Bates, B.S. (Virginia State), M.Ed., M.A. (Minnesota), Ph.D. (Ohio State), 1993. *Professor of Music*

Susan E. Bates, B.A. (Rockford), A.M., Ph.D. (Washington U.-Mo.), 1996. *Associate Professor of Chemistry*

Druann Bauer, B.A. (Northeast Louisiana), M.A. (Southwestern Louisiana), Ph.D. (Louisiana-Lafayette, 2006. *Associate Professor of English*

Eric T. Baumgartner, B.S.A.E. (Notre Dame), M.S.A.E. (Cincinnati), Ph.D. (Notre Dame), 2006. *Professor of Mechanical Engineering; Dean, Smull College of Engineering*

Ronald E. Beaschler, B.S.B.A. (Ohio Northern), M.Ed. (Bowling Green), 1988. *Assistant Professor of Sport Management*

Laurie Bell, B.S.Ed. (Ohio State), B.D. (Toledo), M.S. (James Madison), Ph.D. (Toledo), 1992. *Professor of Dance and Resident Artist; Chair, Department of Theatre Arts*

Bryan O. Boulanger, B.A., B.S., M.S. (University of Connecticut); Ph.D. (University of Iowa), 2012. *Associate Professor of Civil Engineering*

Christopher P. Bowers, B.A. (Kenyon), Ph.D. (Ohio State), 2003. *Associate Professor of Chemistry; Chair, Department of Chemistry and Biochemistry*

Khristo N. Boyadzhiev, M.S., Ph.D. (U. of Sofia), 1990. *Professor of Mathematics*

Joanne C. Brant, A.B. (Cornell), J.D. (Case Western Reserve), 1991. *Professor of Law*

Kimberly Broekemeier, B.A. (St. Olaf), Ph.D. (Minnesota), 1998. *Associate Professor of Biochemistry*

Rebecca J. Brooks, B.A. (Ohio), M.A., Ph.D. (Kent State), 2007. *Visiting Instructor in Sociology*

Charles L. Busch, B.S.E.E. (Ohio Northern), P.E. (Ohio), 1963. *Director of Administrative Computing Services with rank of Assistant Professor*

Sandra K. Calvert, B.A. (Ohio Northern), M.A. (Dayton), Ph.D. (Toledo), 1994. *Assistant Professor of Education, Director of the Center for Teacher Education*

Mellita Caragiu, M.S. (Babes-Bolyai, Romania), Ph.D. (Penn State), 2000. *Professor of Physics; Chair, Department of Physics and Astronomy*

Mihai Caragiu, B.S., M.S. (U. of Bucharest), Ph.D. (Penn State), 2000. *Professor of Mathematics; Chair, Department of Mathematics and Statistics*

Robert M. Carrothers, B.A., M.A., Ph.D. (Kent State), 2005. *Associate Professor of Sociology; Chair, Department of Psychology and Sociology*

Rebecca L. Casey, B.M. (Ohio Northern), M.M. D.M.A., (Cincinnati Conservatory of Music), 1994. *Associate Professor of Music ; Chair, Department of Music*

Tevey C. Celius, B.S. (Puget Sound), Ph.D. (Cornell), 2005. *Associate Professor of Chemistry*

Jeffrey J. Christoff, B.S. Pharm. (Duquesne), Ph. D. (Ohio State), 1998. *Professor of Medicinal Chemistry*

Jill R. Christopher, B.S.B.A. (Ohio Northern), M.Acc. (Case Western Reserve), D.B.A. (Cleveland State), 1988. *Associate Professor of Accounting*

C. Antoinette Clarke, B.S. (Rochester Institute of Technology), J.D. (Toledo), 2001. *Professor of Law*

Forrest J. Clingerman, A.B. (Augustana College), M.Div. (Boston University), Ph.D. (Iowa), 2005. *Associate Professor of Religion*

Alfred E. Cohoe, B.A. (Albion), M.A. (Bowling Green), 1962. *Professor of Psychology and Sociology*

- Alexandra Coman**, B.S. (Romanian-American University), M.S., Ph.D. (Lehigh University), 2013. *Assistant Professor of Computer Science*
- Jacqueline Connour**, B.S., B.A. (Iowa State University), Ph.D. (Johns Hopkins School of Medicine). *Visiting Instructor in Biology*
- David C. Crago**, A.B. (Duke), J.D. (U. of Michigan), 1991. *Professor of Law; Provost and Vice President for Academic Affairs*
- Catherine L. Craker**, A.A., B.S., B.A. (Emory University), Ph.D. (University of Notre Dame), 2009. *Visiting Assistant Professor of Biological Sciences*
- Russ Crawford**, B.A., B.S. (Chadron State), M.A., Ph.D. (Nebraska), 2005. *Associate Professor of History*
- Patrick Croskery**, B.A. (Virginia), Ph.D. (Chicago), 1999. *Associate Professor of Philosophy; Director of Honors Program*
- Mark D. Cruza**, B.S.B.A. (Ohio State University), M.Ed., M.A., Ph.D. (Bowling Green State University), 2009. *Assistant Professor of Communication Arts*
- Margaret E. Cullen**, B.A. (SUNY at Buffalo), M.A. (San Francisco State), Ph.D. (Tennessee), 1992. *Associate Professor of English*
- Mark A. Davis**, BA (University of Massachusetts), MFA (Smith College), 2014. *Assistant Professor of Theatre*
- Dennis J. De Luca**, B.A. (Upsala), Ph.D. (Cleveland State), 2003. *Associate Professor of Biological Sciences; Program Director for Forensic Biology*
- Louis A. DiBerardino**, B.S., M.S., Ph.D. (University of Illinois at Urbana-Champaign), 2014. *Assistant Professor of Mechanical Engineering*
- Nicole Dickson**, B.S. (Muskingum), M.S., Ph.D. (Ohio State), 2011. *Assistant Professor of Chemistry*
- Natalie A. DiPietro Mager**, Pharm.D. (Ohio Northern), M.P.H. (Indiana), 2007. *Associate Professor of Pharmacy Practice*
- Mark H. Dixon**, B.A. (Indiana), M.A. (Tennessee), Ph.D. (Purdue), 1999, 2003. *Associate Professor of Philosophy*
- Jennifer A. Donley**, B.A. (College of Wooster), M.L.I.S. (Kent State University), 2009. *Cataloging and Knowledge Architect Librarian with the rank of Assistant Professor, Heterick Library*
- Douglas G. Dowland**, B.A. (Michigan State University), M.A., Ph.D. (University of Iowa), 2010. *Assistant Professor of English*
- Manoranjan S. D'Souza**, M.B.B.S., M.D. (Mumbai University), Ph.D. (University of Texas), 2013. *Assistant Professor of Pharmacology*
- Michele Durand**, B.A. (Bluffton), M.Ed. (Bowling Green), 2001. *Assistant Professor of Physical Education*
- Keith F. Durkin**, B.A. (Marywood), M.S., Ph.D. (Virginia Polytechnic Institute), 1999. *Professor of Sociology*
- Melissa Eddings**, B.F.A. (Ohio U.), M.F.A. (Edinboro-PA), 1997. *Associate Professor of Art*
- John K. Estell**, B.S.C.S.E. (Toledo), M.S., Ph.D. (Illinois), 2001. *Professor of Computer Engineering & Computer Science*
- Randall L. Ewing**, B.S.B.A., M.B.A. (Bowling Green), 1979. *Associate Professor of Marketing*
- James W. Fenton, Jr.**, B.S.B.A., M.B.A. (Toledo), Ph.D. (Iowa), 2005. *Professor of Management; Dean, Dicke College of Business Administration*
- David J. Fetrow**, B.A. (Albion), M.L.S. (Emporia State), 2004. *Reference Librarian with rank of Associate Professor in the Law Library*
- Thomas P. Finn**, B.A. (Marquette), M.A. (Notre Dame), Ph.D. (Wisconsin), 1999. *Professor of French and Spanish*
- Katherine Fleck**, B.S. (Bowling Green), M.A. (Indiana), LP.D. (Northeastern), 2011. *Visiting Assistant Professor of Public Relations*
- Kami L. Fox**, B.S.N., M.S. (Wright State University), 2010. *Assistant Professor of Nursing*
- Bruce P. Frohnen**, B.A. (California State), M.A. (University of California), J.D. (Emory), Ph.D. (Cornell), 2008. *Professor of Law*
- William R. Fuller**, B.A. (Trinity College), M.S., M.A., Ph.D. (Indiana), 2002. *Associate Professor of Mathematics*
- G. Richard Gainey**, B.S. (Jones College), M.M.C. (U. of South Carolina), 1988. *Associate Professor of Communication Arts and Director of Broadcasting*
- Diana K. Garlough**, B.S., M.A. (Ohio State), Ph.D. (Bowling Green), 2001. *Assistant Professor of Education; Chair, Department of Education*
- Scott D. Gerber**, B.A. (William and Mary), J.D., Ph.D. (Virginia), 2001. *Professor of Law*
- John C. Gillham**, B.A. (San Diego State University), M.S. D.Ed. (Pepperdine University), 2010. *Assistant Professor of Education*
- Adrienne C. Goss**, B.S., M.A. (Eastern Michigan University), Ph.D. (Georgia State University), 2014. *Assistant Professor of Education*
- Michele Govekar**, B.S. (Loyola), M.B.A. (St. Bonaventure), Ph. D. (Minnesota), 1997. *Professor of Management*
- Paul Govekar**, B.B.A. (Loyola, Chicago), M.B.A. (DePaul), D.B.A. (Nova Southeastern), 2004. *Visiting Associate Professor of Management*
- Jeffrey A. Gray**, B.S. (Pennsylvania State), Ph.D. (M.I.T.), 1993. *Professor of Chemistry*
- Paul L. Hartman**, B.S. (University of Maryland), M.A. (University of Dayton), M.S., Ph.D. (Air Force Institute of Technology), 2013. *Assistant Professor of Operations Research and Supply Chain Management*
- Firas Hassan**, Bachelor of Engineering (Beirut Arab University), Masters of Engineering (American University of Beirut), Ph.D. (University of Akron), 2009. *Associate Professor of Electrical and Computer Engineering*
- Elena V. Helmer**, J.D. (Kazakh State), LL.M. (Yale), 2006. *Assistant Director of Democratic Governance and Rule of Law LL.M. with rank of Assistant Professor of Law*
- Mary Ellen Carasiti Hethcox**, B.S. (University of Rhode Island), Pharm.D. (Virginia Commonwealth University), 2012. *Assistant Professor of Pharmacy Practice, Director of Drug Information*
- Melissa S. Hickman**, B.B.A. (Shorter University), M.B.A. (Kennesaw State University), D.B.A. (Nova Southeastern University), 2012. *Associate Professor of Accounting*
- Kevin D. Hill**, B.S. (U. of Kentucky), J.D. (Northern Kentucky U.), LL.M. (Temple), 1985. *Professor of Law*
- Brian Hofman**, B.B.A. (Iowa State), M.Ed. (Bowling Green), Ph.D. (Toledo), 1998. *Associate Professor of Sport Management*
- Donald A. Hunt**, B.S. (Baldwin-Wallace), M.S. (Case Western Reserve), M.S., Ph.D. (Ohio State), 1999. *Associate Professor of Mathematics*

- Thomas A. Hunt**, B.M. (Oberlin), M.M., Ph.D. (Florida), 2008. *Professor of Music*
- Juliet K. Hurtig**, B.S.E.E. (Ohio Northern), M.S.E.E., Ph.D. (Ohio State), P.E. (Ohio), 2000. *Professor of Electrical and Computer Engineering; Associate Vice President for Academic Affairs*
- Feng Jao**, B.S. (Sheng-te Christian College), M.S. (Fort Hays State), Ph.D. (Toledo), 2000. *Associate Professor of Educational Technology*
- Ronald A. Johns**, B.S. (U. of N. Carolina), M.A., Ph.D. (Indiana), 1990. *Associate Professor of Mathematics*
- Ann C. Johnson**, B.A., M.A., Ph.D. (University of Notre Dame), 2013. *Assistant Professor of Psychology*
- Jean-Marie Kamatali**, LL.B., LL.L., (National University of Rwanda), M.A. (Notre Dame), Ph.D. (Institute of International Law and International Relations), 2008. *Assistant Professor of Law*
- John Paul M. Kanwit**, B.A., M.A. (Georgetown) Ph.D. (Indiana), 2007. *Associate Professor of English*
- Nicole Karn**, B.S. (Muskingum College), M.S., Ph.D. (Ohio State University), 2011. *Assistant Professor of Chemistry*
- Errol G. Katayama**, B.A., M.A., Ph.D. (U. of Toronto), 2000. *Professor of Philosophy; Chair, Department of Philosophy and Religion*
- Brian E. Keas**, B.S. (Hope), M.S. (Wake Forest), Ph.D. (Michigan State), 2000. *Associate Professor of Biological Sciences; Assistant Vice President for Academic Affairs (Faculty Fellow)*
- Deidré A. Keller**, B.A. (Yale University), J.D. (Emory University.), 2010. *Associate Professor of Law*
- Ronald D. Kieffer**, B.S. Ed. (Baldwin-Wallace), M.A. (Bowling Green), Ph.D. (Ohio State), 2005. *Associate Professor of Education*
- Karen L. Kier**, B.S. Pharm. (Ohio Northern) M.Sc., Ph.D. (Ohio State), 1986. *Professor of Clinical Pharmacy; Director of Assessment*
- Thomas L. Kier**, B.S. Pharm. (Ohio Northern), M.A., Ph.D. (Bowling Green), 1986. *Associate Dean of Pharmacy Operations, Raabe College of Pharmacy, with rank of Instructor of Pharmacy*
- Tristin M. Kilgallon**, B.A. (Kutztown University), M.S. (Troy State University), M.S. (St. Joseph's University), J.D., LL.M. (Ohio Northern University), 2012. *Assistant Professor of Criminal Justice*
- Dong Kim**, (B.A. (Seoul National University), M.A. (Oklahoma State), Ph.D. (Oklahoma), 2011. *Assistant Professor of Finance*
- David Kinder**, B.S. (Purdue), M.S. (Indiana), Ph.D. (Illinois), 1993. *Professor of Medicinal Chemistry*
- Robert E. Kleine, III**, B.S. (New Hampshire), Ph.D. (Cincinnati), 2002. *Associate Professor of Marketing, Associate Dean of the College of Business Administration*
- Kelly J. Koblela**, B.S., M.S. (Indiana University), 2012. *Systems Librarian with rank of Instructor in the Heterick Library*
- David W. Koh**, B.S. (Central College), B.S., Ph.D. (University of Kentucky), 2013. *Assistant Professor of Pharmacology*
- Stephen H. Kolomyjec**, B.A. (Olivet College), Ph.D. (James Cook University), 2012. *Visiting Assistant Professor of Cell and Molecular Biology*
- David J. Kosmyna**, B.E. (Toledo), M.M. (Ohio), D.M.A. (Cincinnati), 2006. *Associate Professor of Music*
- Megan M. Krainok**, B.A. (West Virginia Wesleyan College), M.S. (University of Pittsburgh), Ph.D. (West Virginia University), 2010. *Assistant Professor of Psychology*
- Kelly M. Kroustos**, B.S. (Ohio Dominican), Pharm.D. (Ohio State), 2008. *Associate Professor of Pharmacy Practice*
- Matthew D. Kutch**, B.S. (Central Michigan), M.E., Ph.D. (North Carolina State), 2011. *Assistant Professor of Economics*
- Vladimir A. Labay**, B.S., M.S. (University of Manitoba), Ph.D. (University of Victoria), 2014. *Visiting Professor of Electrical and Computer*
- Laurie K. Laird**, B.S.M.E. (Ohio Northern), M.S. (Cincinnati), 1993. *Assistant Professor of Mechanical Engineering; Director of Corporate and Alumni Relations*
- Heath J. LeBlanc**, B.S. (Louisiana State University), M.S., Ph.D. (Vanderbilt University), 2012. *Assistant Professor of Electrical and Computer Engineering*
- Michael W. Lewis**, B.A. (Johns Hopkins), J.D. (Harvard), 2006. *Professor of Law*
- Christina M. Liebrecht**, B.S. (Toledo), M.S. (Walden), 2011. *Assistant Professor of Nursing*
- John P. Lomax**, B.A. (Nebraska Wesleyan), M.A. Chicago), Ph.D. (Kansas), 1988. *Professor of History*
- Michael B. Loughlin**, B.A., M.A., Ph.D. (Indiana), 1988. *Professor of History*
- John N. Mager, III**, B.A. (Hiram), M.S. (Miami), Ph.D. (Cornell), 2005. *Associate Professor of Biological Sciences*
- Tarek M. Mahfouz**, B.S. (Cairo), M.S. (West Texas A & M), Ph.D. (Houston), 2006. *Associate Professor of Pharmaceutical Chemistry*
- William J. Mancuso**, B.S. (SUNY-Brockport), M.F.A. (Buffalo), 1998. *Assistant Professor of Art; Chair, Department of Art and Design*
- Jed E. Marquart**, B.S.M.E. (Ohio Northern), M.S.A.E., Ph.D. (Dayton), P.E. (Ohio), 1991. *Professor of Mechanical Engineering*
- Robert K. McAfee**, B.S. (Bowling Green), Ph.D. (Northern Illinois), 2011. *Assistant Professor of Human Anatomy*
- David McClough**, B.A. (Vanderbilt), M.B.A. (American), M.A. (Bowling Green), Ph.D. (Southern California), 2008. *Associate Professor of Economics*
- Kristie A. McHugh**, B.S., M.B.A., Ph.D. (Binghamton University), 2014. *Assistant Professor of Management*
- Eva B. McManus**, B.A. (Madison), M.A. (James Madison), Ph.D. (Tennessee), 1988. *Professor of English*
- Brian W. Meehan**, B.S. (Wagner College), M.S. (University of Bridgeport), Ph.D. (College of William and Mary), 2012. *Associate Professor of Forensic Biology*
- David Mikesell**, B.S.M.E. (Ohio Northern), M.S.M.E., Ph.D. (Ohio State), 2007. *Associate Professor of Mechanical Engineering*
- Richard F. Miller**, B.S. (Ohio Northern), M.S., (Walden), Ph.D. (Indiana State University), 2007. *Instructor in Technological Studies*
- Allison A. Mittendorf**, B.A., J.D. (Toledo), 2004. *Instructor of Legal Writing*

- Susan M. Montenery**, B.S.N. (Ohio State), M.S. (Walden), D.N.P. (Duquesne University), 2007. *Associate Professor of Nursing, Interim Director of the Nursing Program; Interim Chair, Department of Nursing*
- Jennifer Moore**, B.A. (Mercyhurst College), M.A. (University of Colorado at Boulder), Ph.D. (University of Illinois at Chicago), 2012. *Assistant Professor of Creative Writing*
- Anita R. Morgan**, B.S. (St. Mary of the Woods College), M.B.A. (Ball State University), D.B.A. (Nova Southeastern University), 2013. *Associate Professor of Accounting and Director of the MPPA*
- Traci W. Moritz**, B.A. (Bluffton), M.L.S. (Indiana), 2004. *Instruction and Access Services Librarian with rank of Assistant Professor in Heterick Library*
- Vicki A. Motz**, B.A., M.S. (Rutgers), Ph.D. (Boston University), 2008. *Visiting Assistant Professor of Biological Sciences*
- Michelle R. Musser**, B.S. (Ashland University), Pharm.D. (The Ohio State University), 2010. *Assistant Professor of Pharmacy Practice*
- Brian J. Myers**, B.A. (Hiram), Ph.D. (Indiana), 2002. *Associate Professor of Chemistry*
- Deidre Myers**, B.S. Pharm. (Ohio Northern), 2000. *Instructor in Pharmacy*
- Erica L. Neeley**, B.A. (Oxford), M.A., Ph.D. (Illinois), 2008. *Assistant Professor of Philosophy*
- Nancy G. Neslund**, B.A. (Willamette University), J.D. (Columbia University), LL.M. (New York University), 2012. *Visiting Assistant Professor of Law*
- Lauren A. Newell**, B.A. (Georgetown University), J.D. (Harvard), 2012. *Assistant Professor of Law*
- Christine L. North**, B.A., M.A. (Nebraska-Omaha), Ph.D. (Oklahoma), 2006. *Associate Professor of Communication Arts*
- Kofi Nsia-Peptra**, B.A. (University of Cape Coast-Ghana), LL.M. (Essex), Ph.D. (Wayne St.), 2008. *Associate Professor of Political Science*
- Paul Nutter**, B.S., M.B.A. (Ohio), 2000. *Associate Professor of Technology; Chair, Department of Technological Studies*
- Mark E. Olah**, B.S. (Philadelphia College of Pharmacy and Science), Ph.D. (Ohio State), 2008. *Associate Professor of Pharmacology; Chair, Department of Pharmaceutical and Biomedical Sciences*
- Liam O'Melinn**, B.A. (California, Santa Cruz), Ph.D. (Yale), J.D. (Columbia), 2001. *Professor of Law*
- Patricia A. Parteleno**, B.S.Pharm., Pharm.D. (Ohio Northern), 1996. *Associate Professor of Pharmacy Practice; Director of Experiential Programs*
- Kristie E. Payment**, B.A. (SUNY-Potsdam), M.A. (St. Bonaventure), Ph.D. (Kent State), 2005. *Associate Professor of Psychology*
- Trilisa M. Perrine**, B.S. (Western Michigan), Ph.D. (Chicago), 2008. *Associate Professor of Chemistry*
- Raymond F. Person, Jr.**, B.A., M.Div. (Phillips U.), Ph.D. (Duke), 1993. *Professor of Religion*
- Lindsey M. Peters**, Pharm.D. (University of Cincinnati), 2014. *Visiting Assistant Professor of Pharmacy Practice*
- Erin A. Petersen**, Pharm.D. (Ohio Northern University), 2012. *Assistant Professor of Pharmacy Practice*
- Ronald C. Peterson**, B.S. (Northern Illinois U.), Ph.D. (U. of Chicago), 1987. *Professor of Biochemistry*
- Matthew A. Phillips**, B.A. (Brigham Young University), M.B.A. (Pennsylvania State), 2011. *Assistant Professor of Accounting*
- David Pimentel**, B.A. (Brigham Young University), M.A. (University of California, Berkeley), J.D. (University of California), 2012. *Visiting Associate Professor of Law*
- Jason C. Pinkney**, B.A. (Macalester), Ph.D. (New Mexico State), 2002. *Professor of Physics*
- Jonathan D. Pitts**, B.A., M.A. (Idaho), M.A., Ph.D. (SUNY-Buffalo), 2000. *Associate Professor of English*
- Sieglinde Poelzler-Kamatani**, Magistra Philosophiae (Karl-Franzens University-Austria), 2008. *Visiting Instructor in Spanish*
- Edward S. Potkanowicz**, B.S. (Youngstown State), M.A., Ph.D. (Kent State), 2011. *Assistant Professor of Exercise Physiology*
- Susan D. Putt**, B.S. (Bowling Green State University), M.S. (University of Akron), 2014. *Visiting Instructor in English*
- David W. Raack**, B.A. (U. of Kansas), J.D. (U. of Missouri), LL.M. (Temple), 1984. *Professor of Law*
- Ryan R. Rahrig**, B.Sc., M.A., Ph.D. (Bowling Green State University), 2010. *Assistant Professor of Mathematics and Statistics*
- David A. Retterer**, B.S. (David Lipscomb), M.S. (Vanderbilt), 1979. *Associate Professor of Mathematics and Computer Science*
- Brent Ridenour**, B.S.B.A. (Ohio Northern), M.Ed. (Bowling Green), 2002. *Assistant Professor of Sport Management*
- Michael J. Rider**, B.S.M.E. (Ohio Northern), M.E.M.E. (Texas A & M), Ph.D. (Purdue), E.I.T. (Ohio), 1979. *Professor of Mechanical Engineering*
- Leslie A. Riley**, B.S. (University of Dayton), M.S., Ph.D. (Washington State University), 2009. *Assistant Professor of Biological Sciences*
- Lisa G. Robeson**, B.A. (Maryland), M.A. (Georgetown), Ph.D. (Catholic University), 2002. *Professor of English; Chair, Department of English*
- Laurence D. Robinson**, B.S. (Michigan), M.A., Ph.D. (California-Berkeley), 2002. *Associate Professor of Statistics*
- Trevor P. Robinson**, B.S. (Ohio Northern University), M.S., Ph.D. (Utah State University), 2014. *Assistant Professor of Manufacturing Technology*
- Andrew M. Roecker**, Pharm.D. (Ohio Northern), 2002. *Professor of Pharmacy Practice; Chair, Department of Pharmacy Practice*
- Tena L. Roepke**, B.S., M.Ed., M.A., (Bowling Green), Ed.D. (Toledo), 1984. *Associate Professor of Mathematics*
- Robert C. Rohan**, B.S. (Maryland), M.E. (Frostburg State), 2004. *Assistant Professor of Physical Education*
- Yousif B. Rojeab**, B.S. (Jordan University), Ph.D. (Houston), 2007. *Associate Professor of Pharmaceutics*
- Boyd Rorabaugh**, B.S. (Mount Vernon Nazarene), M.S. (Bowling Green), Ph.D. (Creighton), 2004. *Associate Professor of Pharmacology and Cell Biology*
- David L. Rouch**, B.S. (Ball State), M.S. Ed. (Eastern Illinois), Ph.D. (Ohio State), 1988. *Professor of Technology*

William Britton Rowe, B.F.A. (Ohio Northern), M.F.A. (Michigan), 1999. *Associate Professor of Art*

Nancy Paine Sabol, B.A. (Ohio), J.D. (Ohio State), 2001. *Associate Professor of Law; Director of Academic Support*

Brian P. Sage, B.A. (Western Michigan University), M.F.A. (Wayne State University), 2014. *Assistant Professor of Theatre*

Lori Salhoff, B.S. (University of Toledo), M.S. (Kettering University), 2012. *Visiting Instructor of Technology*

Jamie L. Sanford, B.S. (Elmira), Ph.D. (Ohio State), 2011. *Assistant Professor of Biology*

David M. Savino, B.S.B.A., M.B.A. (Youngstown), 1979. *Associate Professor of Management*

David R. Sawyers, B.S.M.E. (Rose-Hulman), M.S.M.E., Ph.D. (Notre Dame), 2003. *Associate Professor of Mechanical Engineering*

Tammy J. Schakett, A.S. (Columbus State Community College), B.A. (Northwood University), M.B.A. (Touro University International), Ph.D. (TUI University), 2010. *Assistant Professor of Entrepreneurship*

Susan Schertzer, B.S.B.A., M.B.A. (Xavier), Ph.D. (Cincinnati), 2007. *Associate Professor of Marketing*

Henning Schroeder Bachelor's and Mater's equivalent (University of Arts Berlin), M.M. (Western Michigan University), D.M.A. (University of Illinois at Urbana-Champaign), 2013. *Associate Professor of Music*

Nancy R. Schroeder, B.S. (Ohio Northern), M.S. (Cleveland State), 2011. *Assistant Professor of Nursing*

Sandra J. Schroeder, B.S., M.A., Ph.D. (Ohio State), 2004. *Associate Professor of Mathematics*

Raymond F. Schuck, B.A. (Defiance), M.A. (Wright State), 1996. *Director of Museum Studies with the faculty rank of Assistant Professor of History and Collections Specialist*

JoAnn M. Scott, B.A. (San Francisco State U.), M.A., Ph.D. (U. of California), 1987. *Professor of Political Science*

Robert Scott, B.A. (Michigan), M.A. (Chicago), Ph.D. (Michigan State), 1994. *Professor of English*

Kanishka Sen, B.A., M.A. (Jawaharlal Nehru), M.A., Ph.D. (Arizona State), 2003. *Associate Professor of Spanish; Chair, Department of Modern Languages*

Henry Luther Sheets, B.F.A. (Ohio Northern), M.F.A. (Bowling Green), 2005. *Assistant Professor of Art*

Hui Shen, B.S. (Tsinghua), M.S. (Tongji), Ph.D. (Pennsylvania State), 2006. *Associate Professor of Mechanical Engineering*

Terrence E. Sheridan, B.A. (Hiram), Ph.D. (Dartmouth), 2002. *Professor of Physics*

Kelly M. Shields, Pharm.D. (Butler), 2001. *Associate Professor of Pharmacy Practice; Assistant Dean and Director of Pharmacy Student Services*

Thomas E. Simmons, B.S.B.A., B.A. (Ohio Northern), M.S. (Ohio University), 1999. *Athletic Director; Assistant Professor of Sport Management*

Jonathan S. Smalley, B.S.C.E. (Ohio Northern), M.S., Ph.D. (Ohio State), P.E. (Ohio), 1978. *Professor of Civil Engineering; Chair, Department of Civil Engineering*

David Smith, B.A. (Kent State), M.A., Ph.D. (Chicago), 1998. *Associate Professor of Geography*

Kristen N. Sobota, Pharm. D. (West Virginia), 2007. *Associate Professor of Pharmacy Practice; Director of Outreach Programming*

Jenelle L. Sobotka, B.S., Pharm.D. (Iowa), 2010. *Professor and Endowed Chair of Pharmacy Practice*

Christopher E. Spiese, B.S. (Juniata), Ph.D. (SUNY), 2011. *Assistant Professor of Chemistry*

Amy L. Stockert, B.S. (Indiana-Purdue Fort Wayne), M.S., Ph.D. (Ohio State University), 2005. *Associate Professor of Biochemistry*

Rema G. Suniga, B.S., M.S. (Univ. of Santo Tomas, Manila), Ph.D. (Clemson), 1994. *Associate Professor of Biological Sciences*

Heather D. Surface, B.B.A., M.S. (Ohio University), 2014. *Visiting Instructor in English*

Scott Swanson, B.S. (Alma), M.S. (Kent State), Ph.D. (Ohio State), 1996. *Associate Professor of Exercise Physiology; Chair, Department of Human Performance and Sport Sciences*

William Theisen, B.S., M.S., Ph.D. (Iowa), 1995. *Professor of Physics*

Shane Tilton, B.A. (Muskingum College), M.A., Ph.D. (Ohio University), 2014. *Assistant Professor of Multimedia Journalism*

Stephen C. Veltri, B.A. (U. of Pittsburgh), J.D. (Georgetown), LL.M. (Columbia), 1986. *Professor of Law*

Srinivasa Vemuru, B. Tech., M.Tech. (Indian Institute of Technology), Ph.D. (Toledo), 2001. *Professor of Electrical and Computer Engineering*

Robert Verb, B.S. (University of Findlay), Ph.D. (Ohio), 2001. *Professor of Biology*

James K. Walter, B.A. (Indiana U. of Pennsylvania), M.A., M.A., Ph.D. (Wisconsin), 1988. *Professor of Modern Languages*

Jennifer L. Walton, B.A., M.A. (Indiana State), Ph.D. (Bowling Green), 2006. *Associate Professor of Communication Arts; Chair, Department of Communication and Media Studies*

Bryan Ward, B.A. (Ohio Northern), J.D. (North Carolina), Ph.D. (Ohio State), 1999. *Associate Dean for Academic Affairs in the College of Law, Professor of Law*

Robert L. Ward, B.S., M.S. (U. of Missouri-Rolla), Ph.D. (U. of Arkansas), 1989. *Professor of Civil Engineering*

Robert A. Waters Jr., B.A. (Pennsylvania), M.A. (California State), J.D. (Mississippi Lamar Law Center), Ph.D. (Mississippi), 2005. *Visiting Assistant Professor of History*

Sarah Waters, B.M. (Ohio Northern), M.M. (Western Michigan), D.M.A. (Ohio State), 2005. *Associate Professor of Music*

Chandalor H. West, B.S. (Wilmington), M.H. Ed. (East Carolina), 2001. *Assistant Professor of Athletic Training; Athletic Trainer*

Robin M. White, B.S.N., M.S.N. (Nevada), 2006. *Assistant Professor of Nursing*

Bradley M. Wile, B.Sc. (St. Francis Xavier University), Ph.D. (Dalhousie University), 2010. *Assistant Professor of Chemistry*

Harry James Wilson, B.A. (Florida State), M.A. (West Florida), Ph.D. (Louisiana State), 2007. *Assistant Professor of Management and Geographic Information Systems*

Kurt Wilson, B.S. (Manchester), M.A. (Western Michigan), 1999. *Assistant Professor of Athletic Training; Head Athletic Trainer*

Michelle A. Wilson, B.S. (East Stroudsburg), M.S. (Marshall U.), 1991. *Associate Professor of Athletic Training; Athletic Trainer*

Kate J. Witte, B.A. (U. of Northern Iowa), M.S. (Indiana U.), 1991. *Assistant Professor of Health Education; Senior Women's Administrator*

Cynthia J. Woodfield, DNP (Duquesne University), M.S. (University of Dayton), M.S. (Wright State University), B.S. (Salve Regina University) 2013. *Visiting Assistant Professor of Nursing*

Dexter R. Woods, B.A., J.D. (Ohio Northern), LL.M. (U. of Florida), 1987. *Professor of Business Administration*

Marcia M. Worley, B.S., B.S. (University of Pittsburgh), M.S. (The Ohio State University), Ph.D. (University of Minnesota), 2012. *Associate Professor of Pharmacy Administration*

Fan Ye, B.S., M.S. (Southeast University), Ph.D. (Texas A & M University), 2013. *Assistant Professor of Civil Engineering*

John-David S. Yoder, B.S.M.E., M.S.M.E., Ph.D. (Notre Dame), 2001. *Professor of Mechanical Engineering; Chair, Department of Mechanical Engineering*

Linda M. Young, B.A. (Wittenberg), M.S., Ph.D. (Ohio State), 1988. *Professor of Biological Sciences*

Sherry Young, B.A. (Michigan State), J.D. (Harvard), 1987. *Professor of Law*

Ziad Youssfi, B.S., M.S., Ph.D. (Michigan State University), 2013. *Assistant Professor of Electrical and Computer Engineering*

Mohammad Zaki, B.S. (Minnesota State University), Ph.D. (University of Illinois), 2009. *Assistant Professor of Mathematics*

Jingyun Zhang, B.A., M.A. (Beijing Foreign Studies University); M.A., M.S., Ph.D. (University of Alabama), 2012. *Assistant Professor of Marketing*

Jake R. Zimmerman, B.S. (Montana State), Ph.D. (North Dakota), 2006. *Associate Professor of Chemistry*

Phillip R. Zoladz, B.A. (Wheeling Jesuit University), M.A., Ph.D. (University of South Florida), 2009. *Assistant Professor of Psychology*

PART-TIME FACULTY

(as of 2/1/2015)

Sandra S. Abdallah, B.A., M.A. (University of Toledo), 2013. *Lecturer in English Language Programs*

Gregory J. Adkins, No bachelor's degree, 2015. *Lecturer in Biological Sciences.*

Summer M. Aebker, B.M. (University of Cincinnati), 2009. *Lecturer in Music*

Shelleigh Alexander, B.S. (Bowling Green State University). *Lecturer in English Language Programs*

Lucinda J. Altstaetter, B.M., M.M. (Bowling Green), 1977. *Lecturer in Music*

Kelly C. Anspaugh, B.A., B.M. (Ohio State University), Ph.D. (University of Wisconsin), 2023. *Lecturer in English*

Melissa K. Appleton, B.A. (Ohio State University), 2014. *Lecturer in Education.*

Pamela Ashmore, B.M. (Wisconsin-Eau Claire), M.M. (Bowling Green), 1999. *Lecturer in Music*

Peter Lance Ashmore, B.M., M.M. (Bowling Green), 1997. *Lecturer in Music*

Chaima E. Bagais, B.A. (Indiana University of Pennsylvania), M.A. (Bowling Green State University) 2013. *Lecturer in English Language Programs*

Thomas Barnhart, B.S., M.A.T. (Purdue), 2001. *Lecturer in Mathematics*

Mark Batman, B.S. (Wilmington), M.A. (Loras College), 2004. *Lecturer in Physical Education*

Thomas G. Beery, B.S., M.A. (Bowling Green), 1998. *Lecturer in Writing*

Nicholas Bellman, B.S. Pharm., Pharm.D. (Ohio Northern), 2007. *Clinical Professor of Pharmacy*

Jeffrey L. Benson, BA (Ohio State University), JD (Ohio State University), 2008. *Adjunct Professor of Law.*

John Berg, B.A., M.A., Ph.D., 2013. *Lecturer in Education*

Michelle L. Bestic, Pharm.D. (Ohio Northern), 2007. *Clinical Professor of Pharmacy*

Bryan Bishop, 2013. *Assistant Clinical Professor of Pharmacy*

Amanda C. Black, B.F.A. (Kent State University), 2013. *Lecturer in Theatre Arts*

Teresa L. Blowers, B.A. (University of Cincinnati), 8/25/2014. *Lecturer in Music*

Mary Sue Bly, B.S. (University of Toledo), 2013. *Lecturer in Nursing*

Lisa Bradley, B.A. (Ohio Northern University), 2014. *Lecturer in History, Politics and Justice.*

Keithen M. Branch, Pharm.D. (Ohio Northern), 2007. *Clinical Professor of Pharmacy*

Tyler D. Brooks, M.P.P.A. (Ohio Northern University) B.S. (Mount Vernon Nazarene University), 2014. *Lecturer in Accounting*

Rinaldo A. Brusadin, B.S., M.S. (Ohio State University), 2007. *Lecturer in Pharmacy*

Joyce Buetner, B.S.Ed. (Ohio State), M.S.Ed. (Dayton), 2002. *Lecturer in English*

Diane M. Cappelletty, B.A. (University of Toledo), B.S., Pharm.D. (Ohio State University), 2015. *Lecturer in Pharmacy.*

Michael T. Carrig, B.S. (Bowling Green), 2002. *Lecturer in Technology*

Michael X. Carrigan, BLS (Bowling Green State University), MA (University of Findlay), 2014. *Lecturer in English Language Programs.*

Janis A. Carse, B.S.N., M.S. (Ohio State University), 2010. *Lecturer in Nursing*

Clayton J. Casey, B.S. (Ohio Northern University), 2013. *Lecturer in Biological Sciences*

Jo-Ann L. Caudill, B.S. Pharm. (North Carolina), 1999. *Clinical Professor of Pharmacy*

Thomas B. Cochrane, B.A. (Albion College), J.D. (University of Michigan), 2009. *Adjunct Professor of Law.*

- Steven D. Christopher**, B.S.B.A., J.D. (Ohio Northern), 2007. *Lecturer in Business*
- Angela Collene**, 2013. *Assistant Clinical Professor of Pharmacy*
- Elizabeth A. Cozad**, B.F.A. (Wright State), 2012. *Lecturer in Communication Art*
- Denise D'Arca**, B.M. (Culver-Stockton), M.A. (Northeast Missouri), Ph.D. (Missouri), 1988. *Lecturer in Music*
- Jennifer Daberko**, Pharm.D. (Ohio Northern), 2005. *Clinical Professor of Pharmacy Practice*
- Norman Damschroder**, B.M. (Toledo), M.M. (Bowling Green), 2008. *Lecturer in Music*
- Darrel R. Davison**, B.S. (Iowa State University), J.D. (Cornell University Law School), 2009. *Adjunct Professor of Law*
- Kristin M. Daws**, B.A. (Northern Iowa), 2007. *Lecturer in Chemistry*
- Russell J. Decker**, B.S. (University of Northwestern Ohio), M.S. (Tiffin University), 2009. *Lecturer in Political Science*
- Douglas Degen**, B.S.C.E. (Ohio Northern), 1999. *Lecturer in Engineering and Technology*
- Micaela C. Deming**, B.A. (Bucknell University), J.D. (Ohio State University), 2014. *Staff Attorney in the Lima Legal clinic, Assistant Director of Clinical Programs, and Lecturer in Law*
- Fred T. DePalma**, No bachelor's degree, 2015. *Lecturer in Biological Sciences*
- Kathleen E. DeVault**, B.A. (Ohio State), M.F.A. (Massachusetts), 2001. *Rank of Instructor in Theatre Arts*
- Roseanna L. Dufault**, B.A. (Colorado Women's Col.), M.A. (Middlebury), Ph.D. (U. of Colorado), 1989. *Lecturer*
- Mary Jane Eichelberger**, B.M.Ed. (Heidelberg), 1994. *Lecturer in Music*
- Karen Elliott**, B.A. (Youngstown), J.D. (Ohio Northern). *Adjunct Professor of Law*
- Doris J. Engler**, B.A. (Bluffton), 2013. *Lecturer in Business*
- Kevin M. Ernst**, B.B.A., M.B.A. (Mount Vernon Nazarene University), 2013. *Lecturer in Business*
- Melinda J. Estell**, B.A. (University of Toledo), M.E. (Bowling Green State University), 2014. *Lecturer in English*
- Peggy Ewald**, B.B.A. (Tiffin), M.A. (Heidelberg), 2004. *Lecturer in Human Performance and Sport Sciences*
- Howard N. Fenton III**, B.S., J.D. (Texas), 1988. *Adjunct Professor of Law; Director of Democratic Governance and Rule of Law LL*
- David Fickel**, B.A. (Gettysburg), J.D. (Toledo). *Adjunct Professor of Law*
- Steven G. Fisher**, 1999. *Lecturer in Technology*
- Serenity Ford**, *Assistant Clinical Professor of Pharmacy*
- Mary E. Fox**, B.A., J.D. (Ohio Northern), 2001. *Lecturer in Business*
- Natalie A. Gardner**, B.S., Pharm.D. (Purdue University), 2012. *Assistant Clinical Professor of Pharmacy*
- Casey D. Garman**, B.S. Pharm. (Cincinnati), Pharm. D. (South Carolina), 2005. *Clinical Professor of Pharmacy*
- Micah A. Graber**, B.M. (Bowling Green), 2007. *Lecturer in Music*
- Tyler L. Graves**, B.M. (Ohio Northern University), M.M. (Miami University), 2015. *Lecturer in Music*
- Andrea M. Graytock**, B.S. (Marywood College), M.S. (St. John's University), Ph.D. (Ohio State University), 2014. *Laboratory Instructor*
- James M. Green**, B.A. (Abilene Christian University), M.M. (Miami University), 2014. *Lecturer in Music*
- Peter Haase**, B.S. (Ohio Northern University), Doctor of Veterinary Medicine (Ohio State University), 2014. *Lecturer in Biological Sciences*
- Nicole J. Harger**, Pharm. D. (Ohio Northern), 2008. *Assistant Clinical Professor of Pharmacy Practice*
- Donald C. Hart**, B.S. (Ohio Northern), 2005. *Lecturer in Pharmacy and Psychology*
- David M. Hartzell**, Pharm. D. (Ohio Northern), 2005. *Clinical Professor of Pharmacy*
- Rebecca Hauserman**, B.S.N. (Ashland), M.S.N. (University of Phoenix), 2008. *Lecturer in Nursing*
- Byron Hawbecker**, B.A. (Manchester), M.S. (Arizona), Ph.D. (Kent State), 2005. *Lecturer in Chemistry*
- Scott David Hoff**, B.A. (University of Akron), M.S. (University of Dayton), 2014. *Lecturer in Education*
- Jennifer E. Hovest**, B.S. (University of Cincinnati), M.S. (Regis University), 2014. *Lecturer in Nursing*
- Marjorie C. Hoying**, B.S. (Ohio Northern University), 2014. *Lecturer in Nursing*
- Brenda Hoyt**, B.F.A. (Wright State), 1996. *Lecturer in Communication Arts and Lecturer in Human Performance and Sport Sciences*
- Darrell T. Hulisz**, B.S.Pharm. (U. of Toledo), Pharm.D. (Medical U. of South Carolina), 1991. *Clinical Professor of Pharmacy*
- Jerica L. Humphrey**, B.S. (Eastern Michigan University), M.S. (Spertus College). *Lecturer in Management*
- Melanie L. Hunsicker**, B.S., Pharm.D. (Ohio Northern), 2007. *Clinical Professor of Pharmacy*
- Emily E. Jay**, BFA (Ohio northern University), MFA (Bowling Green State University), 2014. *Lecturer in Art*
- Bruce Johansen**, B.E.S. (Cleveland), M.S. (Pittsburgh), Ph.D. (Worcester Polytechnic Institute), 2000. *Lecturer in Physics*
- Michael A. Jordan**, B.A./B.S. (Ohio Northern University), 2009. *Lecturer in Music*
- Kristen A. Juergens**, B.M. (Indiana University), M.M. (University of Denver), 2014. *Lecturer in Music*
- Travis Jürgens**, B.M. (Indiana University), M.M. (University of Illinois at Urbana-Champaign), 2014. *Music Director*
- Patricia Kaple**, B.S., M.S. (Bowling Green), 2006. *Lecturer in Chemistry*
- Brittany A. Kastrati**, B.A., M.A. (Bowling Green State University), M.A. (University of Findlay), 2015. *Lecturer in English*
- Matthew Kauflin**, B.S. Pharm. (Ohio Northern), Pharm.D. (Toledo), 2001. *Clinical Professor of Pharmacy*

- Terry Keiser**, B.S.Ed. (Ohio Northern), M.A. (Bowling Green), 1967. *Lecturer in Biological Sciences.*
- Megan Keller**, Ph.D. (Ohio Northern University), 2013. *Assistant Clinical Professor of Pharmacy*
- Jason M. Kimbrel**, Pharm. D. (Ohio Northern), 2005. *Clinical Professor of Pharmacy*
- Georg Klaas**, B.A. (St. John's), M.M. (Indiana), 2008. *Lecturer in Music*
- Terri L. Kohlrieser**, B.S. (UT), J.D. (ONU), 2001. *Adjunct Professor of Law.*
- Lauryl R. Kristufek, B.A.**, Pharm.D. (University of Toledo), 2010. *Clinical Professor of Pharmacy*
- Michele L. Kroeger**, B.S.N. (Mt. Carmel College of Nursing), 2010. *Lecturer in Nursing*
- Katie Kuhn**, B.A. (Ohio Northern), M.E. (Ashland), 2011. *Lecturer in Communication Arts*
- Robert Lamb**, B.A., B.S. (St. Louis), M.S., Ph.D. (Illinois), 2012. *Lecturer in Chemistry*
- Dale Laukhuf**, B.M.Ed. (Bowling Green), 1972. *Lecturer in Music*
- Michael C. Leifheit**, Pharm. D. (Ohio Northern), 2005. *Clinical Professor of Pharmacy*
- Justin E. Lehman**, B.A. (Ohio Northern), M.Ed. (University of Cincinnati), 2006. *Lecturer in Human Performance and Sport Sciences*
- Scott Edward Leland**, 2014. *Lecturer in Biological Sciences*
- Mandy Leonard**, *Assistant Clinical Professor of Pharmacy*
- Xi Li**, Bachelor in Economics (Renmin University of China), Master in Urban Planning (University of Louisville), 2014. *Lecturer in Geography.*
- Louis F. Lobenhofer**, A.B. (William and Mary), J.D. (Colorado), LL.M. (Denver), 1979. *Adjunct Professor of Law*
- David E. Lusk**, B.S. (Ohio Northern), 1991. *Lecturer in Chemistry*
- Constance A. Lutz**, B.F.A. (Bowling Green State University), M.A., M.Ed. (Wright State University), Ph.D. (Ohio State University), 2014. *Lecturer in Education.*
- Kirsten E. Osbun Manley**, B.M. (Bowling Green), 1988. *Resident Artist and Lecturer in Music*
- Jason Maus**, B.A. (Heidelberg), M.A. (Bowling Green), 2005. *Lecturer in Human Performance and Sport Sciences*
- Todd McAlpine**, B.S. (Edinboro University of PA), M.S., Ph.D. (University of Kansas), 2013. *Lecturer in Physics*
- Shauna M. McMillian**, B.A., M.A. (Ohio University), 2009. *Lecturer in English Language Programs.*
- Lance Mekeel**, B.A. (Susquehanna University), M.A. (Villanova University), Ph.D. (Bowling Green State University), 2014. *Lecturer in Communication and Media Studies.*
- John R. Miller**, B.S. (Wisconsin), 2005. *Clinical Professor of Pharmacy*
- Vicki S. Mills**, B.S. (Ohio Northern University), M.M. (John Hopkins University) 2012. *Lecturer in Music*
- Tabitha Moody**, B.S. (Ohio Northern University), 2014. *Lecturer in History, Politics and Justice.*
- Bruce A. Morgan**, B.S. (Indiana University), 2014. *Lecturer in Business*
- Randall S. Myers**, B.S. Pharm. (Ohio Northern), 2007. *Clinical Professor of Pharmacy*
- Timothy L. Opp**, B.S. (University of South Carolina, B.A. (Findlay College), M.S. (University of Findlay), 2001. *Lecturer in Physics.*
- McKenzie C. Orr**, B.S.N. (Wright State University), M.S.N. (Walden University), 2013. *Lecturer in Nursing*
- Jan L. Osborn**, B.S. (Ohio State), M.Ed., Ph.D. (Bowling Green), 1998. *Lecturer in Education*
- Meggan Owens**, *Assistant Clinical Professor of Pharmacy*
- Natalie Nicole Paphanchith**, ADN (Rhodes State College), BSN (Ohio Northern University), M.S., (Saint Louis University), 2008. *Lecturer in Nursing*
- Seo Hyun Park**, B.A., M.Ed. (Korea University), Ph.D. (Ohi State University), 2015. *Lecturer in English Language Programs.*
- Gene Parker**, 2008. *Lecturer in Music*
- Cathy Lynn Patton**, B.S.N. (Bluffton University), M.S.N. (Medical College of Ohio), M.B.A. (University of Tiffin), 2005. *Lecturer in Nursing.*
- Dean B. Paul**, B.S. (Mount Union), 2003. *Lecturer in Physical Education*
- Sarah C. Persinger**, Pharm.D. (Ohio Northern), J.D. (Capital University), 2013. *Lecturer in Business Administration*
- Tracey Pierce**, B.S. Pharm. (Toledo), 2000. *Clinical Professor of Pharmacy*
- Rachel A. Pinkney**, B.M. (Oberlin Conservatory), M.M. (Minnesota), 2002. *Lecturer in Music*
- Marjorie Naylor Pitts**, B.A. (University of Massachusetts), M.A. (University of Idaho), 2006. *Lecturer in English Language Programs*
- Stephen Plogsted**, B.S. Pharm., Pharm. D. (Cincinnati), 2001. *Clinical Professor of Pharmacy*
- Harold L. Putt**, B.S. (Clarion), M.A., Ph.D. (Bowling Green), 1983. *Lecturer in Mathematics*
- Rachel M. Rader**, B.S., MAT Mathematics (Bowling Green State University), 2000. *Mathematics Specialist and Lecturer in Mathematics*
- Daniel Reid**, B.S. (Ohio Northern), 2008. *Lecturer in Finance*
- Teresa M. Richard**, B.S.N. (Ohio Northern University), 2013. *Lecturer in Nursing*
- Joan Robbins**, B.A. (Boston College), M.F.A., D.F.A. (Yale School of Drama), 2001. *Lecturer in Communication Arts*
- Douglas E. Rohde**, B.S. (Gannon University), M.S. (Cleveland State University), 2011. *Lecturer in Biology.*
- James E. Roll**, B.S. (Ohio Northern University), M.S. (Bowling Green State University), 2015. *Lecturer in Nursing.*
- Janet Roll**, B.A. (Otterbein), M.S., Ph.D. (Bowling Green), 2003. *Lecturer in Mathematics*
- Kristine A. Rosendale**, B.S., M.B.A. (Bowling Green State University), M.A.Ed. (Baldwin-Wallace College), 2009. *Lecturer in Mathematics*
- Marilyn Roth-Bassinger**, B.A. (Ohio Northern University), B.S. (University of Dayton), 2012. *Lecturer in Music*

Virginia Ruef, 2012. *Assistant Clinical Professor of Pharmacy*

Brian J. Sabol, B.S. (Ohio State), Pharm.D. (Kentucky), 2007. *Clinical Professor of Pharmacy*

Meriah Sage, B.A. (Western Michigan University), M.A. (Eastern Michigan University), 2015. *Lecturer in Theatre Arts*.

Stuart D. Schakett, B.S. (Trident), 2011. *Lecturer in Business*

Joanne B. Schietz, B.S. (St. Joseph College), M.A. (Ohio State University), 2015. *Lecturer in Management*.

Adam Michael Schroeder, B.S. (Ohio Northern University), 2014. *Lecturer in Mechanical Engineering*.

Katie R. Schroeder, B.S.N. (Ohio Northern University), 2013. *Lecturer in Nursing*

Mandi E. Schroeder, B.S.N. (Ohio State), 2011. *Lecturer in Nursing*

Christina Sheridan, B.S. (Bucharest), M.S. (West Virginia), 2004. *Lecturer in Physics and Astronomy*

Burlin L. Sherrick, B.S.M.T. (Medical University of South Carolina), 2002. *Interim Director, Clinical Laboratory Science; Lecturer in Biology*

Rebecca J. Sillaman, B.S. (Ohio Northern University), Pharm.D. (University of Florida), 2012. *Assistant Clinical Professor of Pharmacy*

Florin Simioanca, B.M. (G. Dima Music Academy), M.M. (Bowling Green State University), 2010. *Lecturer in Music*

Jerry L. Skinner, B.A. (SUNY), J.D. (Ohio Northern University), 2013. *Adjunct Professor of Law*.

Amanda L. Smith, B.S. (Central Michigan University), M.A. (Ball State University), 2011. *Lecturer in English Language Programs*

Jeffrey P. Smith, B.S. (Miami University), M.A. (University of Findlay), 2007. *Lecturer In English Language Programs*

Kevin Smith, B.S. (U.S. Coast Guard Academy), J.D. (Cleveland State University), 2012. *Adjunct Professor of Law*.

Mark Allen Smith, Associates Degree (Northwestern Business College), 2014. *Lecturer in Technological Studies*.

Michael Thomas Smith, B.S., M.A. (Bowling Green State University), 2006. *Lecturer in Technology*

Michele Smith, B.M. (Mannes College of Music), M.M. (Cleveland Institute of Music), 2012. *Lecturer in Music*

Nicole L. Smith, B.S. (Ohio University), 2015. *Lecturer in Nursing*.

Darrin W. Snyder Belousek, B.S. (Bradley University), Ph.D. (University of Notre Dame), 2011. *Lecturer in Religion*

Assaf Sommer, B.M. (Rubin Academy of Music and Dance), M.M. (Manhattan School of Music), 2010. *Lecturer in Music*

James W. Spicer, Pharm.D. (Ohio Northern University), 2009. *Assistant Clinical Professor of Pharmacy*

Amanda Stacy, B.A., M.A. (Marietta College), J.D. (Ohio Northern University), 2015. *Adjunct Professor of Law*.

Rory W. Stauber, B.S.Ed. (Indiana), Christian Theological Seminary), M.Phil., Ph.D. (Drew), 2011. *Lecturer in Religion*

Kristen Stauffer, 2013. *Lecturer in Human Performance and Sport Sciences*

David Brent Sycks, B.M. (Capital University), M.M. (Indiana University). *Lecturer in Music*

Umar Sulayman, B.A., M.A. (Baghdad), M.S. (Indiana University of Pennsylvania), 2009. *Lecturer in Modern Languages*

Judi C. Suman, B.S. (Olivet Nazarene University), M.A. (University of Findlay), 2013. *Lecturer in English Language Programs*

Shana Tachikawa, B.A. (Ohio Northern University), M.B.A. (University of Findlay), 2014. *Lecturer in English*.

Tracy A. Temple, B.A. (Ohio Northern University), M.Div. (Methodist Theological School in Ohio); Ph.D. cand. (University of Denver), 2014. *Lecturer in Religion*.

Erin Torres, B.M. (Steson University), M.M., D.M.A. (Ohio State University), 2013. *Lecturer in Music*

William Trudeau, 2011. *Lecturer in English Language Programs*

Juergen A. Waldick, BA, JD, 2013. *Adjunct Professor of Law*.

Hongchen Wang, B.A. (Suzhou University), M.A. (University of Findlay), 2014. *Lecturer in English Language Programs*

Joan Weller, B.M. (Ohio State), M.M. (Temple), 2008. *Lecturer in Music*

Jonathan E. Wey, B.A. (Indiana University), M.M. (Butler University), 2015. *Lecturer in Music*.

Kathy J. White, B.S. (Bowling Green State University), M.Ed. (University of Toledo), 2013. *Lecturer in English Language Programs*

Nancy Woodley, Hon.B. Sc., Ph. D. (Guelph) 1997. *Lecturer in Biological Sciences*

ADJUNCT FACULTY (as of 2/1/2015)

Mukul A. Agrawal, B.S. (University of Bombay), Ph.D. (University of Cincinnati), 2010. *Adjunct Professor of Pharmacy*

Jerald M. Andry, B.S. (University of Illinois), M.S. (Ohio University), Ph.D. (Ohio State University), 2010. *Adjunct Professor of Pharmacy*

Jeffrey L. Benson, B.A. , J.D. (Ohio State), 2008. *Adjunct Professor of Law*

Martha Blackford, B.A. (Taylor), Pharm.D. (Ohio Northern), 2008. *Adjunct Professor of Pharmacy*

Tamara S. Blum, B.S. (University of Findlay), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Rebecca S. Boxer, B.A. (Barnard College), M.D. (University of Pennsylvania), 2008. *Adjunct Professor of Pharmacy*

William Burke, B.A. (Capital), D.O. (Ohio), 1998. *Adjunct Professor of Pharmacy*

Laura A. Chumney, B.S. (Walsh University), 2010. *Adjunct Professor of Clinical Laboratory Sciences*

Camille Cindia, B.S. (Youngstown State University), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

Adamo Cirese, B.S.M.T. (University of Akron), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

Shelia Clay-Erwin, B.S. (Texas Southern University), M.Ed. (University of Houston), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Thomas B. Cochrane, B.A. (Albion College), J.D. (University of Michigan), 2009. *Adjunct Professor of Law*

Gregory S. Cooper, B.S. (Purdue University), J.D. (Duquesne), 2008. *Adjunct Professor of Law*

Nicole S. Dauber, Pharm.D. (Southwestern Oklahoma State), 2008. *Adjunct Professor of Pharmacy*

Darrel Davidson, B.S. (Iowa State), J.D. (Cornell), 2008. *Adjunct Professor of Law*

Kathryn A. Denne, Pharm.D. (Ohio Northern University), 2010. *Adjunct Professor of Pharmacy*

Susan C. Drees, B.S. (Xavier University), Pharm.D. (University of Cincinnati), 2010. *Adjunct Professor of Pharmacy*

Shawn Eaton, Pharm.D. (Ohio Northern), 2006. *Adjunct Professor of Pharmacy*

Stephanni A. Ellenberger, B.A. (Arizona State University), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

Karen Elliot, A.B. (Youngstown), J.D. (Ohio Northern), 1998. *Adjunct Professor of Law*

Mason Evans IV, B.A. (Miami), J.D. (George Washington), 2012. *Adjunct Professor of Law*

David J. Fickel, B.A. (Gettysburg), J.D. (Toledo), 1986. *Adjunct Professor of Law*

Mary E. Flickinger, F.S. (University of Cincinnati), 2010. *Adjunct Professor of Clinical Laboratory Sciences*

Carl Fossaceca, B.S. Pharm. (Ohio State), Pharm.D. (Florida), 2004. *Adjunct Professor of Pharmacy*

Jenny M. Francis, B.A., B.S. CLS (Miami University), 2003. *Adjunct Professor of Clinical Laboratory Sciences*

Elizabeth Frede, B.A., B.S. (Miami University), Pharm.D. (University of Cincinnati), 2010. *Adjunct Professor of Pharmacy*

Thomas E. Frost, B.A. (University of Findlay), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Donna M. Gobeli, B.S.M.T. (Akron University), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

James C. Grissom, B.S. (Wright State University), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

JoEllen L. Hanigosky, Pharm.D. (Duquesne University), 2012. *Adjunct Professor of Pharmacy*

Michael R. Humphrey, B.S. Pharm. (Ohio Northern University), M.D. (Ohio State University), 2008. *Adjunct Professor of Pharmacy*

Tammie K. Hursh, B.S. (Bowling Green), J.D. (Toledo), 2011. *Adjunct Professor of Law*

Margaret Huwer, B.S. (Ohio Northern), Pharm.D. (Ohio State), 1996. *Adjunct Professor of Pharmacy*

Lynn A. James, B.A. (Capital University), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

George E. Kikano, B.S., M.D. (American University of Beirut), 2000. *Adjunct Professor of Pharmacy*

Kelly John-Adam Knerr, Associate's Degree (Columbus State Community College), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Dan Knight, B.S. (Wilmington College), Pharm.D. (University of Cincinnati), 2010. *Adjunct Professor of Pharmacy*

Delbert Konnor, B.S., M.S. (Wayne State), 2006. *Adjunct Professor of Pharmacy*

Jamie Lauf, B.S. (Bowling Green State University), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Suzanne M. Marques, B.S.Ph. (Ohio Northern University), Pharm.D. (University of Cincinnati), 2002. *Adjunct Professor of Pharmacy*

Cynthia J. McKnight, B.S. (Mount Union College), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

Holly R. Michener, B.S. (Bowling Green State University), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Laura R. Morris, 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Norman O. Moser, Pharm.D. (Purdue University), D.O. (Kirksville College of Osteopathic Medicine), 2009. *Adjunct Professor of Pharmacy*

Joseph T. Moss, Jr., B.S. (Toledo), M.B.A. (Cleveland State), Pharm.D. (Arkansas), 2007. *Adjunct Professor of Pharmacy*

Cheryl A. Moyer, B.S. (Ohio State University), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Gayle E. Parkhill-Krein, B.A. (Miami University), J.D. (Ohio State University), 2010. *Adjunct Professor of Law*

Hon. Reginald Routson, B.L.S., M.A. (Bowling Green), J.D. (Toledo), 1985. *Adjunct Professor of Law*

Mary H. Putnam, B.A. (Miami University), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

Gary Rutherford, B.S. Pharm. (Ohio Northern), 2000. *Adjunct Professor of Pharmacy*

Gabrielle M. Schmitt, Pharm.D. (Purdue University), 2010. *Adjunct Professor of Pharmacy*

Kristen E. Schmitt, Pharm.D. (Samford University), 2010. *Adjunct Professor of Pharmacy*

Maria C. Sheridan, B.S. (University of Bucharest), M.S. (West Virginia University), 2012. *Adjunct Professor of Pharmacy*

Burlin Sherrick, 2002. *Adjunct Professor of Clinical Laboratory Sciences*

Jerry L. Skinner, B.A. (SUNY), J.D. (Ohio Northern University), 2013. *Adjunct Professor of Law*

Hon. Kevin Smith, B.S. (U.S. Coast Guard Academy), J.D. (Cleveland State University), 2012. *Adjunct Professor of Law*

Joseph Sreenan, B.X. (Xavier), M.D. (Medical College of Ohio). *Adjunct Professor of Clinical Laboratory Sciences*

Diane E. Stennett, 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Beth A. Stevens, B.S. (Bowling Green State University), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

Megan C. Stojic, Pharm.D. (Ferris State University), 2010. *Adjunct Professor of Pharmacy*

Victoria A. Tate, Pharm.D. (University of Cincinnati), 2012. *Adjunct Professor of Pharmacy*

L. Robert Thaxton, B.A. (Miami University), J.D. (Ohio State University), 2010. *Adjunct Professor of Law*

Kimberly Thomas, B.S. (Ohio State University), J.D. (Ohio Northern University), 2013. *Adjunct Professor of Law*

Paul S. Thorpe, B.S. (Brigham Young University), M.D. (University of Utah School of Medicine), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

Ann M. Van Horn, B.S. (Ohio Northern University), 2006. *Adjunct Professor of Clinical Laboratory Sciences*

Dawn L. Vassil, B.S. (Barry University), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Juergen A. Waldick, A.A. (Montgomery College), B.A. (American), J.D. (Ohio Northern), 1989. *Adjunct Professor of Law*

Grant M. Walliser, Pharm. D. (Ohio Northern University), 2013. *Adjunct Professor of Pharmacy*

Katherine F. Whitson, B.S. (Akron University), 2010. *Adjunct Professor of Clinical Laboratory Sciences*

W. Brian Wierwille, B.S. (Ohio Northern University), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Christine L. Wilmoth, B.S. (Weber State University), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

Michelle L. Wiss, 2004. *Adjunct Professor of Clinical Laboratory Sciences*

Joanna M. Wright, A.A.S. (Marion Technical College), 2012. *Adjunct Professor of Clinical Laboratory Sciences*

EMERITI (as of 2/1/2015)

Kendall L. Baker, B.A. (Maryland), M.A., Ph.D. (Georgetown), 1999-2011. *President Emeritus*

DeBow Freed, B.S. (U.S. Military Academy), M.S. (Kansas), Ph.D. (New Mexico), D.Lett. (Ohio Northern), 1979-99. *President Emeritus*

Albert A. Baillis, A.B., J.D. (Western Reserve), LL.M. (New York), 1957-91. *Professor of Law, Emeritus*

Thomas Banks, B.A. (Memphis State), M.A., Ph.D. (Emory), 1966-2003. *Professor of English, Emeritus*

Gary E. Bayliss, B.S.Ed., M.A. (Bowling Green), 1974-2004. *Associate Professor of Communication Arts Emeritus*

David J. Benson, B.A. (Michigan State), J.D. (Syracuse), 1973-98. *Professor of Law, Emeritus*

Amar N. Bhattacharya, B.V.Sc., D.V.M. (Bengal Vet., India), M.S., Ph.D. (Ohio State), 1970-2000. *Professor of Pharmacology, Emeritus*

Bruce E. Burton, B.S.M.E. (Ohio U.), M.A.E. (Chrysler Inst. of Engr.), M.S. (Ohio State), Ph.D. (Colorado), 1958-99. *Professor of Mechanical Engineering, Emeritus*

Joseph F. Campoll, B.S. (Rhode Island), M.S. (Ithaca), 1975-2005. *Associate Professor of Health and Physical Education, Emeritus*

Merle Indra Canagaratna, BSc, MSc, 1987-2012. *Acquisitions/Systems Librarian with rank of Professor Emeritus, Heterick Library*

Sebastian Canagaratna, B.S. (U. of Colombo), Ph.D. (U. of Liverpool, U.K.), 1986-2008. *Professor of Chemistry Emeritus*

Silas E. Carmean, B.S.E.E. (Ohio Northern), M.S., Ph.D. (Ohio State), 1960-78, 1987-2000. *Professor of Electrical and Computer Engineering, Emeritus*

Bruce D. Chesser, B.F.A., M.F.A. (Ohio), 1970-2002. *Professor of Art, Emeritus*

Philip W. Compton, B.A. (Manchester), M.A. (Bowling Green), Ph.D. (Emory), 1967-2002. *Professor of Psychology, Emeritus*

Gale E. Daugherty, B.A., M.A.Ed. (Idaho State), 1975-99. *Associate Professor of Health and Physical Education, Emeritus*

Donald W. Davey, B.A. (Notre Dame), Ph.D. Florida, 1974-2004. *Professor of Modern Languages, Emeritus*

James DeVore, B.F.A., M.F.A. (Ohio U.), 1967-97. *Professor of Art, Emeritus*

Clyde W. Dornbusch, B.A. (DePauw), M.A., Ph.D. (Duke), 1962-92. *Professor of English, Emeritus*

Ronald L. Evans, B.S. Ed. (Ohio Northern), M.A. (Bowling Green), 1966-1999. *Associate Professor of Mathematics, Emeritus*

William L. Evans, B.A., J.D. (Ohio Northern), 1975-2002. *Professor of Law, Emeritus*

Thomas P. Faulkner, B.S., Ph.D. (Purdue), 1978-2006. *Professor of Pharmacology, Emeritus*

Francis A. Gangemi, B.S. (Notre Dame), M.S., Ph.D. (Catholic), 1967-95. *Professor of Physics, Emeritus*

Roger H. Goldberg, B.A. (Cornell, M.A., Ph.D. (Indiana), 1969-2010. *Associate Vice President for Academic Affairs and Professor of Economics Emeritus*

Thomas A. Gossel, B.S. Pharm. (Ohio Northern), M.S., Ph.D. (Purdue), 1972-2002. *Professor of Pharmacology, Emeritus*

Judy Greavu, B.S., M.F.A., 1989-2005. *Associate Professor of Art Emerita*

Irma Lou Griggs, B.S., M.Ed. (Kent State), Ph.D. (Akron), 1987-2002. *Professor of Education, Emeritus*

F. Lee Grismore, B.S.E.E. (Ohio Northern), M.S.E.E. (Missouri School of Mines and Metallurgy), Ph.D. (Georgia Institute of Technology), 1991-2001. *Professor of Electrical and Computer Engineering, Emeritus*

Daniel S. Guy, B.A. (Ohio Wesleyan), J.D. (Ohio Northern), LL.M., S.J.D. (Michigan), 1959-74, 1977-98. *Professor of Law, Emeritus*

Howard L. Haight, B.S., M.S. (Nebraska), Ph.D. (Iowa), 1968-95. *Professor of Chemistry, Emeritus*

Richard L. Haight, A.B. (Boston), J.D. (Suffolk), LL.M. (Boston), 1984-2005. *Professor of Law, Emeritus*

Byron L. Hawbecker, B.A. (Manchester), M.S. (Arizona), Ph.D. (Kent State), 1963-2003. *Professor of Chemistry, Emeritus and Dean of the Getty College of Arts & Sciences, Emeritus*

Metta Lou Henderson, B.S., M.S., Ph.D. (Arizona), 1978-98. *Professor of Pharmacy Practice, Emerita*

- Dennis W. Herr**, B.S.E.E., (Ohio Northern), M.S. (Ohio State), P.E. (Ohio), 1979-2009. *Associate Professor of Electrical and Computer Engineering, Emeritus*
- Sharon Herr**, B.A. (St. Benedict), A.M.L.S. (Michigan), 1974-2005. *Professor Emerita, Heterick Library*
- Harold H. Hinderliter**, A.B. (Houghton), M.Div. (Wesley Theological), Ph.D. (Vanderbilt), 1960-94. *Professor of Philosophy and Religion, Emeritus*
- Carl W. Hoagstrom**, B.S. (Kearney), M.S. (Purdue), Ph.D. (Arizona), 1975-2005. *Professor of Biological Sciences, Emeritus*
- Robert A. Hovis**, B.S. (Youngstown), M.S. (Case Western), Ph.D. (Ohio State), 1975-2009. *Professor of Mathematics Emeritus*
- Stephen Iseman**, B.A., M.A., Ph.D. 1993-2011. *Professor of Communication Arts/Public Relations Emeritus*
- Bruce E. Johansen**, B.E.S. (Cleveland), M.S. (Pittsburgh), Ph.D. (Worcester Polytechnic Institute), 1967-1999. *Professor of Electrical Engineering, Emeritus*
- Charles L. Johnson**, B.A., M.A. (California State-Long Beach), Ph.D. (Purdue), 1977-2001. *Professor of Communication Arts, Emeritus*
- Dwight D. Khoury**, B.A., M.A. (Wayne State), 1977-94. *Associate Professor of Foreign Languages, Emeritus*
- David W. Kurtz**, B.S. (Houghton), Ph.D. (Syracuse), 1973-2005. *Professor of Chemistry, Emeritus*
- Robert E. Lamb**, B.A., B.S., M.S., Ph.D., 1978-2011. *Professor of Chemistry Emeritus*
- Gayle E. Lauth**, B.S. Ed. (Ohio U.), M.S. (Indiana), 1967-2000. *Professor of Health and Physical Education, Emerita*
- Corra A. Layou**, A.B. (Ohio U.), M.L.S. (Carnegie Library School), 1969-89. *Associate Professor, Emerita*
- Earl E. Lhamon**, B.A., B.S.E.E. (Ohio Northern), M.A. (Bowling Green), 1959-2002. *Professor of Mathematics, Emeritus*
- Anne Lippert**, B.A. (Holy Names), M.A. (Washington), Ph.D. (Indiana), 1971-2009. *Vice President for Academic Affairs and Professor of French Emerita*
- Paul M. Logsdon**, B.A. (Ohio State), M.S.L.S. (Kentucky), 1977-2013. *Director of Heterick Memorial Library, Emeritus (with rank of Associate Professor, Heterick Library, Emeritus)*
- Andrew Ludanyi**, B.A. (Elmhurst), M.A., Ph.D. (Louisiana State), 1958-2008. *Professor of Political Science Emeritus*
- Leo R. Maier**, B.S.M.E. (Purdue), M.E. (Penn State), Ph.D. (Iowa State), 1975-2001. *Professor of Mechanical Engineering, Emeritus*
- Morton L. Mallin**, B.S. (Philadelphia College of Pharmacy and Science), M.S. (Hahnemann), Ph.D. (Cornell), 1964-1993. *Professor of Microbiology, Emeritus*
- Terry L. Maris**, B.G.S., M.B.A., Ph.D. (U. of Nebraska), 1990-2014. *Professor of Management, Emeritus and Dean of the College of Business Administration, Emeritus*
- Richard P. Meininger**, B.A., M.A., Ph.D., 1973-2012. *Professor of Economics, Emeritus; Associate Dean of the College of Business Administration, Emeritus*
- G. Rex Messick**, B.S.E.E. (Ohio Northern), M.S. (Pittsburgh), 1958-97. *Associate Professor of Physics, Emeritus*
- Donald E. Milks**, B.C.E. (Clarkson), M.S., Ph.D. (Arizona), 1965-2001. *Professor of Civil Engineering, Emeritus*
- George B. Miller Jr.**, B.S.A.E. (Georgia Tech), M.Ed. (Emory), Ed.D. (Georgia), 1960-2001. *Professor of Education, Emeritus*
- Dolores W. Moore**, A.B. (Marshall), M.B.A. (Ohio U.), CMA, 1974-91. *Associate Professor of Accounting, Emerita*
- Nelson J. Moore**, B.A. (Manchester), M.S. (Ohio State), Ph.D. (Arizona), 1972-2001. *Professor of Biological Sciences, Emeritus*
- Eric V. Nelson**, B.S., M.S. (Wisconsin), Ph.D. (Manitoba), 1967-2000. *Professor of Biological Sciences, Emeritus*
- Charles M. Oliver**, B.S. (Western Kentucky), A.M. (Missouri), Ph.D. (Bowling Green), 1965-92. *Professor of English, Emeritus*
- Clyde A. Painter**, B.B.A. (Northeastern), M.A. (Northern Colorado), Ed.D. (Penn State), 1978-91. *Professor of Management, Emeritus*
- Peter A. Previte**, B.S. Pharm. (Philadelphia), M.S. (Wayne), J.D. (Ohio Northern), 1968-2011. *Professor of Pharmacy Administration Emeritus*
- Nils Riess**, B.A. (Valparaiso), M.A. (Northern Illinois), 1975-2013. *Professor of Communication Arts, Emeritus.*
- Arden "Stretch" Roberson**, B.S. (Ohio Northern), M.E. (Kent), 1960-1984. *Associate Professor of Health and Physical Education, Emeritus*
- Elizabeth A. Roberts**, B.A., M.A. (Adams), Ph.D. (Ohio), 1973-2003. *Professor of Communication Arts, Emeritus*
- Ronald E. Roll**, B.S., M.S. (Ohio State), 1964-96. *Associate Professor of Physics, Emeritus*
- David C. Saffell**, B.A. (Baldwin-Wallace), M.A., Ph.D. (Minnesota), 1972-2002. *Professor of Political Science, Emeritus*
- Kanti L. Shah**, B.S. (Aligarh, India), M.S. (Kansas), Ph.D. (Oklahoma), 1970-2000. *Professor of Civil Engineering, Emeritus*
- Donald F. Shult**, B.S. (Northwestern), M.S. (Southern Illinois), Ed.D. (Oklahoma State), 1960-63, 1981-97. *Professor of Mathematics, Emeritus*
- Claude C. Smith**, B.A. (Wesleyan), M.A.T. (Yale), M.F.A. (Iowa), D.A. (Carnegie-Mellon), 1986-2006. *Professor of English, Emeritus*
- John R. Smith**, B.S.M.E., M.S.M.E. (Carnegie Mellon), P.E. (Ohio), 1973-88. *Associate Professor of Mechanical Engineering, Emeritus*
- Lewis K. Smith**, B.S. Pharm., Ph.D. (Texas), 1977-2006. *Professor of Biochemistry, Emeritus*
- Donald W. Stansloski**, B.S. Pharm. (Ferris State), M.S., Ph.D. (Nebraska), 1972-95. *Professor of Pharmacy Practice, Emeritus*
- Charles E. Steele, Jr.**, B.S., M.S., M.A. 1978-2009. *Science Librarian with rank of Professor Emeritus, Heterick Library*
- Thomas G. Stewart**, B.S., B.S. Pharmacy, Ph.D. (Florida), 1970-92. *Professor of Medicinal Chemistry, Emeritus*
- Victor L. Streib**, B.I.E. (Auburn), J.D. (Indiana), 1996-2010. *Professor of Law Emeritus*
- Leslie D. Thede**, B.S.E.E., M.S.E.E. (U. of Iowa), Ph.D. (U. of Toledo), 1984-2007. *Professor of Electrical & Computer Engineering Emeritus*
- Joseph M. Theodore**, B.S. (Northeastern), M.S. (Wisconsin), Ph.D. (Massachusetts College of Pharmacy), 1966-1998. *Professor of Pharmacy, Emeritus*

Louis D. Vottero, B.S. Pharm. (Duquesne), M.S. (Ohio State), 1966-92. *Professor of Pharmacy, Emeritus*

David R. Warner Jr., A.B. (George Washington), J.D. (Nebraska), LL.M. (Chicago), 1972-99. *Professor of Law, Emeritus*

David Weimer Jr., B.S., M.S. (Ohio State), 1964-1990. *Professor of Physics, Emeritus*

Kenneth N. Wildman, B.A. (Alfred), M.S., Ph.D. (Florida State), 1974-2001. *Professor of Psychology, Emeritus*

Dale L. Wilhelm, B.S. (Illinois), M.S., Ph.D. (Tennessee), 1966-91. *Professor of Chemistry, Emeritus and Vice President for Academic Affairs, Emeritus*

Roger D. Young, B.S.B.A. (Miami), M.B.A. (Xavier), C.P.A., 1964-98. *Professor of Accounting, Emeritus*

Margaret (Sunny) J. Zank, B.A., M.A. (Oregon), D.A. (Northern Colorado), 1993-2013. *Professor of Music, Emerita*

BOARD OF TRUSTEES

(as of 11/18/2014)

OFFICERS OF THE BOARD

Oscar J. Mifsud, *Chairman of the Board*

Daniel B. Walker, *Vice Chair*

Bill Ballard, *Chief Financial Officer and Treasurer*

Sharon A. Stechshulte, *Secretary*

EX-OFFICIO MEMBERS

Daniel A. DiBiasio, B.A., M.A., Ph.D., *President of the University*

Gregory V. Palmer, B.A., M.Div., *Bishop, The Ohio West Area, The United Methodist Church, Worthington, Ohio*

Melissa M. Eddings-Mancuso, B.F.A., M.F.A., *Chair, University Council*

Kenneth R. Hall, B.S.E.D., B.S.B.A., *President, Alumni Association*

Gina Grandillo, *President, Student Senate*

ELECTED BY THE WEST OHIO CONFERENCE

Thomas A. Compton, B.S., M.B.A., 2015. *Chairman, Precision Strip, Minster, OH (retired)*

Cheryl B. Cotner, B.S.B.A., 2018. *Executive Director, The Future Begins Today, Troy, Ohio*

David C. Harris, B.A., M.Div., 2017. *Senior Minister, Trinity United Methodist Church, Lima, Ohio*

Merle D. Walter, B.S.M.E., M.Div., 2019. *Pastor, St. Luke's United Methodist Church, Fairborn. Arlington, Ohio (retired)*

ELECTED BY THE EAST OHIO CONFERENCE

Janice P. Shorts, B.F.A., 2015. *V.P./HR Business Partner, Charter One Bank, Cleveland, Ohio*

Charles D. Yoost, B.A., M.B.A., 2018. *Senior Pastor, Church of the Saviour, Cleveland, Ohio*

BOARD AT LARGE

Greg M. Allenby, B.S., M.S., M.B.A., Ph.D., 2015. *Professor of Marketing and Statistics, Max M. Fisher, College of Business, The Ohio State University, Columbus, Ohio*

John J. Bishop, B.S.B.A., 2017. *Chairman of the Board, The Motorists Insurance Group, Worthington, Ohio*

Larry F. Boord, B.S.B.A., J.D., 2015. *President, Boord & Associates, Worthington, Ohio*

Donald J. Campbell, B.S.M.E., M.S.M.E., D.E. 2015. *Special Assistant to NASA Deputy Administrator, NASA Glenn Research Center, Cleveland, Ohio (retired)*

Jason S. Duff, B.S.B.A. 2016. *Founder/CEO, Community Storage and Properties, Huntsville, Ohio*

Jennifer A. Frommer, B.S.C.E., 2016. *Vice President, HDR Engineering, Inc., Columbus, Ohio*

Pamela S. Hershberger, B.S., 2019. *Office Managing Partner, Assurance, Ernst & Young, Toledo, Ohio*

John H. Hull, B.S.C.E., M.S.C.E., 2017. *Chairman, Hull & Associates, Toledo, Ohio*

Michael C. Kaufmann, B.S.B.A., 2017. *Chief Financial Officer, Cardinal Health, Dublin, Ohio*

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A		Credit by examination..... 26
Academic calendar, undergraduate..... 4		Criminal justice 133
Academic standing 25		
Accounting courses 159		D
Accreditation..... 2		Dean's List..... 25
Administration, university..... 225		Degrees, awarding of 27
Admission 8		Departmental organizations..... 19
Advance deposit..... 11		Deposits, other 11
Advanced placement..... 8		Dining services 16
Affiliations 2		Disabilities policy 9
Alcoholic consumption..... 17		Dismissal, academic..... 25
Art and Design department..... 43		Distinction, graduation with..... 27
Arts & Sciences, Getty College of 37		Dual degree programs, undergraduate 22
Asian Studies..... 86		
Athletics 20		E
facilities..... 6		Early admission 8
intercollegiate 20		Education department 68
intramural..... 20		education courses 73
Attendance, class 26		Employment..... 15
Auditing, admission for 24		Engineering, Smull College of 171
fee for 11		general engineering courses 175
		civil engineering courses 176
B		computer science courses..... 178
Biological and Allied Health Sciences department 48		cooperative education program..... 175
Board of trustees 224		electrical engineering courses 178
Buildings 6		computer engineering courses 178
Business Administration, Dicke College of 154		graduation requirements, degrees..... 171
accounting 159		mechanical engineering courses 181
core..... 159		registration, professional engineer 174
finance..... 161		English Language Program 24
international business and economics..... 162		English department..... 76
management..... 162		Entrepreneurship 156
marketing..... 163		Examination, credit by 26
pharmaceutical business 164		Examinations, student review..... 26
		Expenses..... 10
		F
C		Facilities..... 6
Calendar, Law 15-16 194		Faculty 212
Calendar, Undergraduate 15-16..... 4		Fax number 1
Center for Teacher Education 68		Fees..... 12
Change in course 24		Final examinations..... 25
Chemistry and biochemistry department..... 60		Finance courses 161
Churches of Ada village..... 17		Financial aid 12, 194
Colleges of		Fraternities,
Arts & Sciences 36		professional 18
Business Administration 153		social 18
Engineering 170		Fraternity housing..... 15
Pharmacy 184		
Law 192		G
College Level Examination Program (CLEP) 8		General Education..... 21, 32, 37, 154, 171, 185
Communications arts activities..... 20		Geography courses 88
Communication and Media Studies department..... 64		Geology courses..... 59
Communications with the University..... 1		Grade appeals procedure..... 26
Computer science program 173		Grading..... 25
Computer Center 7		Graduate placement..... 28
Costs 10		
Counseling..... 16		
Course numbering system..... 26		

H	
Health service.....	16
History, politics and justice department	84
History, university	6
Honorary societies.....	18
Honors Program	33
Human performance and sport sciences department.....	96

I	
Information technology	23
Institute for Social Research.....	101
Intercollegiate competition.....	20
Interfraternity Council	18
International Baccalaureate.....	8
International business and economics courses.....	162
International students	9
International study opportunity	22
Internet address.....	1
Intramural sports.....	20

J	
Juris Doctor degree	21, 193

L	
Late registration fee.....	11
Law, Pettit College of.....	193
Law Review	20, 194, 195
Legacy award program	14
Library.....	23
Loan funds.....	196, 211

M	
Majors offered.....	3
Majors, double or multiple	22
Management courses.....	162
Mathematics and statistics department	102
Marketing courses	163
Mathematics courses.....	104
Medical Laboratory Science courses.....	58
Medical sciences program.....	40
Minor, defined.....	40
Mission and Purpose Statement.....	5
Modern languages department.....	108
Music department.....	114
Musical activities.....	20

N	
Nondiscrimination policy.....	1
The Northern yearbook.....	20
Northern Review.....	20
Nursing department.....	121

O	
Office hours, university.....	1
Option, defined	40
Organization of university.....	5
Outcomes assessment, student participation.....	27

P	
Panhellenic Council	18
Payments and payment plans	10
Pharmaceutical business courses.....	164
Pharmacy, Raabe College of.....	185
academic standing.....	187
classification of students.....	187
Doctor of Pharmacy degree.....	186
dual degree programs	187
graduation requirements.....	186
pharmaceutical and biomedical sciences.....	187
pharmacy practice	188
transfer students.....	185
Philosophy and religion department	125
Physical education.....	96
Physics and astronomy department	130
Placement, Polar Careers	16, 27
Polaris.....	20
Political science courses	94
Post Baccalaureate Program in Medical Laboratory Science	53
Pre-law	41
Premedical sciences.....	41
Pre-art therapy.....	41
Pre-occupational therapy.....	41
Pre-physical therapy.....	41
Pre-physician assistant.....	41
Pre-seminary	41
Private housing.....	15
Professional organizations	19
Psychology, sociology, and criminal justice department.....	133
Publications	20

Q	
Quality points.....	25

R	
Radio station.....	6
Reentry students	8
Refunds	12
Registration	24
Regulations, academic.....	26
Religious life program.....	16
Religious organizations	17
Residence halls	15
Residence life	15
ROTC	34
Air Force, Aerospace Studies	34
Army	35

S	
Scholarships.....	14, 196
Social organizations	18
Sociology courses	139
Sororities	18
Special events	17
Special students, admission for.....	9
Statistics courses.....	107

Student academic conduct	26
Student housing regulations	15
Student handbook	15, 20, 26
Student identification card	12, 196
Student life.....	15
Student Planning Committee.....	18
Student organizations.....	18
Student Right-to-Know Act	9
Student publications	20
Student Senate.....	18
Study Abroad Program	22
Summer Session	12, 28, 194
S/U Grade Option.....	41, 157, 174, 187

T

Teacher licensure	69
Technological studies department	140
Telephone number.....	1
Theatre Arts department.....	145
Transcripts.....	8
Transfer applicants	8
Transfer in university	25
Transient credit.....	26
Transient status	26

V

Veteran or dependent benefits	25
Vision Statement	5
Visitation policy.....	17
Visitors.....	1

W

Withdrawal from university	24
Writing center	23

Y

Yearbook	20
Youth ministry.....	129

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