## NORTHERN KENTUCKY UNIVERSITY

## HOW TO USE THIS CATALOG

The information in this catalog is current at the time of publication. If you are pursuing a degree, you are required to fulfill the requirements as they are listed in the catalog for the semester in which you enroll in that program.

If the requirements change after you have enrolled in the program, you have the option of fulfilling either the old or new requirements. If you elect to fulfill the old requirements and find the necessary courses have been discontinued or substantially changed, you may substitute other courses with the approval of the dean/chair of the college/school.

If your enrollment in the program or the University is interrupted for more than two semesters, your college dean/chair will decide which program requirements must be fulfilled.

This catalog was developed for you, our students. It provides important information to help you plan your education at NKU. The catalog includes information about courses, campus resources and student services, program descriptions, degree requirements and information about college policies and procedures. Use your catalog to help you with your plans for being a successful college student. For help in achieving success in your education program, contact your advisor.

Use the catalog to help you to understand the policies and procedures that may directly affect your life at NKU. A careful reading of the Academic Regulations and Academic Requirements may help you plan ahead and avoid future administrative problems that can have serious ramifications.

Use your catalog to learn about courses and degree requirements. First, if you are an undergraduate student, you may want to review the General Education Requirements. Then, for all students we recommend you read the general description and requirements of the College or School you are attending. Next, examine the curriculum outline, including core courses and prerequisites for your specific major. If you have not declared a major or are in the process of choosing one, use the catalog to help you decide what major is most closely aligned with your goals and interests.

Lastly, read the course descriptions to learn about the content of each course your are considering, whether it is one required for your major or an elective. Knowing what a course is about and how it will fit into your goal or program will help you choose your courses carefully.

Northern Kentucky University will provide each new student with a copy of the Catalog.

## Northern Kentucky University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award undergraduate, graduate, and professional degrees.

## ADDITIONAL INFORMATION

For specific information about the departments and services of the University, direct inquiries to the administrative staff listed below.

Post office address for NKU is: Northern Kentucky University, Highland Heights, KY 41099

Main Telephone Number: Operator - 859.572.5100
General Information, Transcripts of Credits: University Registrar -
Lucas Administrative Center 301 - Phone: 859.572.5556
Admissions: Director of Admissions - Lucas Administrative Center 400 Phone: 859.572.5220

Student Affairs: Vice President of Student Affairs - Lucas Administrative Center - Phone: 859.572.6447

Living Accommodations: Housing Office - Phone: 859.572.5676
A specific college or program: Dean of the College or Chair of the School
Arts and Sciences: Dean - Steely Library 404 - Phone: 859.572.5494
Business: Dean - BEP 401 - Phone: 859.572.5167

Education and Human Services: - BEP 206 - Phone: 859.572.5229
Informatics: Dean - AST 206 - Phone: 859.572.5568
Nursing and Health Professions: Chair - AHC 303 - Phone: 859.572.5248

Graduate Work: Office of Graduate Studies - Lucas Administrative Center - Phone: 859.572.1555

Student Financial Aid: Director of Student Financial Aid - Lucas Administrative Center 416 - Phone: 859.572.5143

Academic Scholarships: Director of Student Financial Aid - Director of Student Financial Aid - Lucas Administrative Center 416 - Phone: 859.572.5143

General publications for the University: University Marketing and Communications - Lucas Administrative Center 701- Phone: 859.572.5585

Career Placement: Career Development Center - University Center 230 Phone: 859.572.5680

Testing: Director of Testing Service - University Center 320 859.572.6373


Dear Prospective Student:

Greetings! I am pleased that you are interested in Northern Kentucky University as your choice to pursue your education.

What you will find at NKU are professors who care about their students, quality programs, small class sizes, convenient course offerings, great location, and easy access to many student organizations. When you become an NKU student, you will be central to our mission as a learner-centered campus.

Your educational journey is just beginning. We welcome you to join the over 14,000 other students who are pursuing their dreams at Northern Kentucky University.

Sincerely,


James C. Votruba
President

## OUR CORE VALUES

"Northern Kentucky University will become a preeminent, learner-centered, metropolitan university recognized for its contributions to the intellectual, social economic, cultural, and civic vitality of its region and that of the Commonwealth."

As we work to achieve our vision, we will be guided by a set of core values that inform our actions and bind us together as an academic community.

## Learner-Centered

We are committed to placing the learner at the center of all that we do. We will serve the learner through our core mission to discover, interpret, apply, and transmit knowledge. As a university, we are a community of learners capable of adaptation and improvement based on new knowledge and insights.

## Excellence

We are committed to the highest standards of excellence in everything that we do-as judged not only by ourselves
but also by those we serve-and to a process of continuous quality improvement based on a culture of evidence.

## Access with the Opportunity to Succeed

We are committed to lifelong public access to education and expert knowledge and to ensuring that learners enrolled in the University have the preparation required to succeed. We measure our success by the accomplishments, the commitments, and the satisfaction of our graduates.

## Public Engagement

We are committed to treating the metropolitan region as an extension of our campus. We will build partnerships throughout the region that both serve the learning needs of the public and enhance the
learning opportunities available to our faculty, staff, and students.

## Intellectual and Creative Freedom

We are committed to intellectual and creative freedom and to the open expression of ideas in a way that supports scholarship and the advanced learning process.

## Multiculturalism

We are committed to advancing multicultural understanding, within both the University and the community, as an educational and civic priority.

## Innovation and Creativity

We re committed to innovative approaches for achieving our vision and will create a campus environment that encourages and rewards creativity and innovation.

## Collegiality and Collaboration

We are committed to building a University community characterized by open communication and shared responsibility for decisions. We will build a culture of collegiality and collaboration within and between the University and the public we serve.

## NORTHERN KENTUCKY UNIVERSITY

## HISTORY

Northern Kentucky University (NKU), the newest of Kentucky's eight state universities, was founded in 1968. However, the roots of Northern can be traced back another twenty years. In 1948, a two-year Extension Center of the University of Kentucky was located in the First District Elementary School in Covington. Then, as Northern Community College, the center moved to the Park Hills area of Covington in 1962. Six years later, the General Assembly of Kentucky authorized the creation of a four-year college, Northern Kentucky State College (NKSC). A board of regents and a consultant were appointed by the governor to assist in planning the new school.

In September 1970, NKSC began offering courses for students pursuing a bachelor's degree. Also, technical and semi-professional two-year programs leading to the degree of Associate of Applied Science were offered in accounting technology, nursing, and professional secretaryship. In 1971 third-year courses were added to the curriculum with the degrees of Bachelor of Arts and Bachelor of Science being initiated in business, education, and most of the basic arts and sciences. Also in 1971, the Salmon P. Chase College of Law, formerly an independent law school in Cincinnati, merged with Northern Kentucky State College.

Graduate programs were initiated in education in 1975; in business administration in 1979; in public administration in 1989; in nursing in 1992; in accountancy in 1998; in computer science in 1999; in instructional leadership in 1999; in teaching in 2001; in information systems in 2001; in industrial/organizational psychology and liberal studies in 2004; in executive leadership and organizational leadership in 2006, and in English and educational leadership in 2008.. The Graduate Center was established on the NKU campus in 1977 to administer graduate programs; programs in social work, library science, nursing, public affairs, and community nutrition are available through the center.

The first building on the new campus in Highland Heights was completed in time for fall semester 1972. In addition to the opening of Louie B. Nunn Hall, the University added fourth-year courses to the curriculum in 1972. The first bachelor's degrees were awarded in May 1973, and course offerings have been continually expanded to meet the needs of a growing student body. On 25 February 1976, Governor Julian Carroll signed House Bill 180, making Northern Kentucky State College a university. Full status was recognized on 19 June 1976. Major construction of the campus began in 1972 and continues today to accommodate a growing enrollment that now is over 14,000 students.

## SCOPE OF PROGRAMS

Northern Kentucky University offers students a broad range of educational programs emphasizing traditional collegiate and liberal studies. Recognizing the needs of its region, the University's primary mission is to provide instruction at the associate and bachelor's degree levels. The University also offers professional and career studies at these levels.

The University offers selected master's degree programs, approved by the Council on Postsecondary Education, and the degree of Juris Doctor through Chase College of Law.

A metropolitan university, Northern takes advantage of its close proximity to other higher education and post-secondary institutions to maximize program offerings for the region through reciprocity agreements with the University of Cincinnati, Cincinnati State Technical and Community College, and Southern State Community College. Northern serves Indiana students through a reciprocity agreement with the State of Indiana. The University also provides applied research, service, and continuing education programs related to the needs of its region.

The University is authorized by the Commonwealth of Kentucky to confer the degrees of Associate of Applied Science, Bachelor of Arts, Bachelor of Arts in Teaching, Bachelor of Fine Arts, Bachelor of Music,

Bachelor of Organizational Leadership, Bachelor of Science, Bachelor of Science Business Informatics, Bachelor of Science in Nursing, Bachelor of Social Work, Master of Accountancy, Master of Business Administration, Master of Public Administration, Master of Science in Computer Science, Master of Science in Nursing, and Master of Arts in Teaching. The degree of Juris Doctor is conferred by the College of Law; the degree of Juris Doctor/Master of Business Administration by the College of Law and the College of Business. The Doctorate of Education in Educational Leadership is conferred by the College of Education.

## COMMITMENT TO EQUAL OPPORTUNITY

It is the policy of NKU not to discriminate in employment, educational programs, admissions policies, financial aid, or other schooladministered programs on the basis of race, sex, color, age, religion, national origin, sexual orientation, physical and/or mental disability, or status as a disabled veteran or veteran of the Vietnam Era. The University takes affirmative action to fulfill its policy against illegal discrimination.

Sexual harassment is a form of sex discrimination and is therefore a violation of NKU's Affirmative Action Policy, Title VII of the Civil Rights Act of 1964, and Title IX of the Educational Amendments of 1972. Sexual harassment is defined as any unwelcome sexual advances, requests for sexual favors, and other verbal, non-verbal, physical, or nonphysical conduct of a sexual nature that unreasonably interferes with an individual's academic or employment performance. The University's policy is in compliance with state and federal guidelines and is consistent with the University's interest in seeking a diverse faculty, staff, and student body. Student inquiries may be directed to the Northern Kentucky University, Dean of Students or the Director of Affirmative Action and Multicultural Affairs, Nunn Drive, Highland Heights, KY 41099.

## ACCREDITATION

Northern Kentucky University is accredited by the Southern Association of Colleges and Schools. The following organizations have accredited NKU programs: Technology Accreditation Commission, ABET, Inc., American Assembly of Collegiate Schools of Business - The International Association for Management Education, American Association of Law Schools, American Bar Association, American Chemical Society, American Council for Construction Education, Commission on Accreditation of Allied Health Education Programs, Commission on Accreditation of Athletic Training Education, Council on Social Work Education, Education Professional Standards Board, Joint Review Committee on Education in Radiologic Technology, National Association of Schools of Public Affairs and Administration, National Association of Schools of Music, National League for Nursing Accrediting Commission, and National Council for Accreditation of Teacher Education.

## STATEMENT OF MISSION

Northern Kentucky University has a singular mission within the Commonwealth as a metropolitan and regional institution. It offers associate, bachelor's, graduate, and professional programs addressing the educational needs of a large and diverse population. Through such programs, the University educates students to be productive citizens and prepares them for careers and life-long learning. As an educational, cultural, and social center, the University stimulates economic development and fosters the academic, artistic, and personal freedoms vital to a free society.

## GEOGRAPHIC REGION

The University serves the citizens of northern Kentucky with a particular focus on the metropolitan area contiguous to greater Cincinnati. Student residential services are provided.

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## INSTITUTIONALADMISSION STANDARDS

Northern Kentucky University admits students under selective standards exceeding the minimum admission guidelines established by the Council on Postsecondary Education, with only limited exceptions. The institutional standards are consistent with the system-wide policy for admitting under-prepared students, including removal of academic deficiencies within a specified time frame. Through this approach, the University seeks to provide both broad access and high-quality programs and to pursue a particular commitment to placebound and other learners and to populations traditionally under represented in higher education.

## DEGREE LEVELS

The University offers selected programs leading to associate, bachelor's, master's, doctorate, and professional law degrees to meet specific metropolitan/regional needs.

## STRATEGIC DIRECTIONS/PROGRAM PRIORITIES

Northern Kentucky University’s distinctive metropolitan/regional mission requires that it maintain a broad range of offerings: occupational programs, a traditional arts and sciences bachelor's curriculum, legal education through Chase College of Law, and graduate programs to meet specific metropolitan/regional needs. The University's responsibility is to meet the needs of both northern Kentucky and the greater metropolitan area. Academic priorities include occupational programs, liberal arts and sciences, business, education, and law. These strategic priorities translate into a core of liberal arts bachelor's degree programs in addition to degree programs priorities at the associate, bachelor's, master's, and professional levels.

## ENHANCEMENT OF INSTRUCTION

Teaching and learning are the primary focus of the University. The University offers a broad range of instructional and support services to promote the curricular and extracurricular development and success of its students. Developmental programs address the needs of under-prepared students; extensive evening offerings and alternate means of course delivery expand opportunities for students with limited access to the campus.

## SERVICE AND RESEARCH FUNCTIONS

Northern Kentucky University seeks to develop creative and mutually beneficial partnerships with public and private enterprises in the local metropolitan area and the region in support of economic growth and investment. The University is especially committed to offering training, applied research, and other services in support of area businesses, industry, and government. It recognizes a special commitment to research and service in support of local elementary and secondary schools in its primary service area.

The University engages in community partnerships coordinated through the Scripps Howard Center for Civic Engagement. The Center was established by NKU to advance public stewardship, citizenship, and engagement through learning, scholarship, and community capacitybuilding. The Center engages students in a variety of community projects, from student philanthropy to service-learning to citizenship skill building. The Center also involves students in a Get Out the Vote for Democracy Initiative. NKU students can be trained as Engagement Specialists and assigned to work with faculty and community leaders on a variety of tasks.

For more information on these and other programs, visit the Center's website at http://civicengage.nku.edu or phone the office at 859-5721448.

## STUDENT RESEARCH AND CREATIVITY

The University strives to enhance the experiences of students by offering two opportunities that enable students to fund and present research or creative activities on interesting topics.

Students can obtain funds to pay for materials, supplies, equipment, software, or project-related travel while they conduct a project under the mentorship of a faculty member. To locate the guidelines for this program, visit: http://rgc.nku.edu/surg.doc.

Students can also present their work at the annual Celebration of Student Research and Creativity. This event highlights students’ achievements in a broad array of scholarly and creative activities. Students display their work through posters, oral presentations, interactive demonstratives, performances, and exhibits of artistic work. Website: http://celebration.nku.edu. For further information on both programs contact the Office of Research, Grants, and Contracts, Administrative Center 616, phone: 859-572-5136.

## COLLABORATIVE VENTURES

The University establishes and maintains cooperative and mutually beneficial relationships with other public institutions of higher education in Kentucky, with elementary and secondary schools, and with other such institutions in northern Kentucky and the interdependent metropolitan area. Curriculum development emphasizes the transfer of credits from another institution toward degree completion.

The University participates in the Kentucky Commonwealth Virtual University (KYVU), a collaboration of Kentucky public and independent universities. KYVU can be found on the Web at http://www.kcv.org. KYVU is a public institution which coordinates credit and non-credit stu-dent-friendly learning environments that can lead to certificates or degrees. KYVU uses a multi-technology approach including one-way broadcast (KET), interactive television (KTLN), and Web-based course work. The Kentucky Commonwealth Virtual Library (KCVL), found at http://www.kcvl.org, provides a single web portal to learning materials state-wide and includes cooperation of Kentucky colleges, universities, P12 school systems, and local libraries.

## EFFICIENCY AND EFFECTIVENESS

Northern Kentucky University addresses the educational needs of its region and people effectively and efficiently. Planning, evaluation, assessment, and prudent commitment of resources are essential to promote continuous improvement of programs and services. Strategic planning that results in elimination of duplicative or unproductive programs not serving metropolitan/regional needs is essential, while the development of carefully selected new programs compatible with the mission is appropriate.

## GRADUATE PROGRAMS

Northern Kentucky University offers an array of excellent graduate programs. Graduate programs are directed to professionals who would like to earn a degree or certificate to help them in their career paths. For more information on NKU graduate programs call the Office of Graduate Programs at 859-572-1555; e-mail: gradprog@nku.edu; or, visit their website at http://gradsite.nku.edu.

## DOCTORATE PROGRAM

Northern Kentucky University offers a doctorate program in educational leadership. For information on the program, call the Office of Graduate Programs at 859-572-1555; e-mail gradprog@nku.edu; or, visit their website at http://gradsite.nku.edu.

## PROFESSIONAL PROGRAM

The University offers one professional program, the Juris Doctor. For information, contact Salmon P. Chase College of Law, 859-572-5490.

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## Responsibility of Student

All students are responsible for being thoroughly familiar with the regulations and requirements set forth in this catalog. Ignorance of the rules described will not be accepted as an excuse for failing to act in accord with them.

## Academic Requirements and Regulations Updates

The colleges of the university reserve the right to change requirements. Program changes will become effective at the beginning of the fall semester and are applicable only to new students and to readmitted students as stipulated elsewhere in this catalog under "Catalog Applicability." Changes in program requirements with any other effective date require the approval of the Provost; such changes will become effective when posted in the Administrative Center, the University Center, the Office of Graduate Programs, and in each academic building. Students should refer any inquiries to the appropriate dean or the registrar. Visit the University website at www.nku.edu for more information. It is the policy of Northern Kentucky University not to discriminate in its educational program, admission policies, financial aid, or other school administered programs on the basis of race, gender, color, age, religion, natural origin, sexual preference, physical or mental handicap, or status as a disabled veteran of the Vietnam Era.

The information contained in this catalog is accurate at the time of publication. Northern Kentucky University reserves the right to revise catalog provisions in accordance with official actions of the Board of Regents and other governing bodies. Students are advised to consult the appropriate department, college, or office for current information about specific programs. Every effort has been make to ensure that this catalog is accurate and up-to-date, but it may contain typographical and other errors. Updates to academic procedures, policies, programs, and course descriptions will be posted on the University website at: http:// access.nku.edu/catalog.


## ACADEMIC PROGRAMS

## DEGREES OFFERED BY NORTHERN KENTUCKY UNIVERSITY

Associate of Applied Science
Associate of Arts
Bachelor of Arts
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science
Bachelor of Science in Nursing
Bachelor of Social Work
Master of Accountancy
Master of Arts in Education
Master of Arts in Teaching
Master of Business Administration
Master of Arts in Integrated Studies
Master of Public Administration
Master of Science in Computer Science
Master of Science in Information Systems
Master of Science in Applied Psychology I/O
Master of Science in Nursing
Juris Doctor
Juris Doctor/Master of Business Administration
Doctorate of Education in Educational Leadership

## ASSOCIATE DEGREES

Construction Technology
Criminal Justice
Liberal Studies
Pre-Business Studies
*Radiologic Technology
*Respiratory Care

## MAJORS AND APPROPRIATE BACHELOR'S DEGREE(S)

*Accounting-Bachelor of Science
Anthropology—Bachelor of Arts or Bachelor of Science
Art-Bachelor of Arts or Bachelor of Fine Arts
Athletic Training-Bachelor of Science
*Biological Sciences-Bachelor of Arts or Bachelor of Science
*Business Administration-Bachelor of Science
*Business Education-(Business \& Marketing Teacher Education) Bachelor of Science
*Business Education-(Non-Teaching Track)—Bachelor of Science
Business Informatics-Bachelor of Science
Chemistry—Bachelor of Science - ACS certified, Bachelor of Science Biochemistry track, Bachelor of Science - Forensics track, Bachelor of Arts
*Communication Studies-Bachelor of Arts
Computer Engineering Technology—Bachelor of Science
Computer Information Technology—Bachelor of Science
Computer Science—Bachelor of Science
Construction Management-Bachelor of Science
Criminal Justice—Bachelor of Arts
Economics-Bachelor of Science
Electronics Engineering Technology
*Elementary Education-Bachelor of Arts
English—Bachelor of Arts
Entrepreneurship-Bachelor of Science
*Environmental Science-Bachelor of Science
*Finance-Bachelor of Science
French—Bachelor of Arts

Geography—Bachelor of Arts
Geology—Bachelor of Arts or Bachelor of Science
German - Bachelor of Arts
Graphic Design—Bachelor of Arts
Health Science - Bachelor of Science
History-Bachelor of Arts
Human Resource Management-Bachelor of Science
Industrial Education-Bachelor of Science
*Interdisciplinary Early Childhood Education-Bachelor of Arts
Integrative Studies-Bachelor of Arts
International Studies-Bachelor of Arts
Journalism—Bachelor of Arts
*Management-Bachelor of Science
*Marketing—Bachelor of Science
Mathematics-Bachelor of Science
Manufacturing Engineering Technology-Bachelor of Science
Media Informatics-Bachelor of Science
Mental Health/Human Services—Bachelor of Science
*Middle Grades Education-Bachelor of Arts
*Music—Bachelor of Arts or Bachelor of Music
*Nursing—Bachelor of Science in Nursing
Organizational Leadership—Bachelor of Arts
Philosophy—Bachelor of Arts
*Physical Education-Bachelor of Arts
*Physical Education-(Non-teaching Track)—Bachelor of Arts
Physics—Bachelor of Arts or Bachelor of Science
Political Science—Bachelor of Arts or Bachelor of Science
Psychology—Bachelor of Arts or Bachelor of Science
Public Relations-Bachelor of Arts
Radio/Television-Bachelor of Arts
Secondary Education
Areas for Certification 8-12
English
Mathematics
Biology
Chemistry
Physics
Earth/Space Science
Social Studies
Business Education (5-12)
Specialty Areas (P-12)
Art
Foreign Language
Health Education (must be paired with another certification
area)
Music
Physical Education
Social Work—Bachelor of Social Work
Sociology—Bachelor of Science
Spanish—Bachelor of Arts
*Sports Business—Bachelor of Science
Theatre Arts—Bachelor of Arts or Bachelor of Fine Arts

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## MASTER'S DEGREES

NKU offers a variety of applied graduate programs designed to help students advance within their current careers or prepare to enter new careers. Listed below are the graduate programs available at the time this catalog was printed. New programs are being added on a regular basis. For information on current or upcoming programs, call the graduate office at 859-572-1555 or visit the graduate program web site at http://gradschool.nku.edu.

Master of Accountancy, Master of Science in Industrial-Organizational Psychology, Master of Arts in Communication, Master of Arts in Teaching, Master of Arts in Education, Master of Business Administration, Master of Science in Computer Science, Master of Public Administration, Master of Science in Business Informatics, Master of Arts in Integrated Studies, Master of Science in Nursing, Master of Arts in English, Master of Science in Health Informatics, Master of Science in Executive Leadership and Organizational Change

## Post-Master's Nurse Practitioner's Certificate*

## DOCTORATE DEGREE

The program leading to the degree of Doctorate of Education in Educational Leadership is described in the Graduate Catalog of Northern Kentucky University.

## PROFESSIONAL DEGREE

## Degree of Juris Doctor

The program leading to the degree of Juris Doctor is described in the catalog of the Salmon P. Chase College of Law of Northern Kentucky University.

## Degree of Juris Doctor/Master of Business Administration

The program leading to the degree of Juris Doctor/Master of Business Administration is described in the catalog of the Salmon P. Chase College of Law of Northern Kentucky University.

## Undergraduate Certificate Programs

Architectural Drafting
Business Informatics
Civic Engagement
Family/Child Development
Freedom Studies
Global Citizenship
Leadership Development
Mechanical and Manufacturing Engineering Technology
Piano Pedagogy

Social Justice
Studies in Creativity
Technological Leadership and Innovation

## Post Baccalaureate Certificates

Applied Economics and Public Policy
Entrepreneurship
Occupational Health Psychology
Sports Business
Marketing Research
Information Systems Management
Information Systems Development
Financial Planning
Finance
General Accounting
Accounting/CPA Track

## Master Level Certificates

Adult Psychiatric Nurse Practitioner
Advanced Taxation
Alternative Certification for Sepcial Education
Business Informatics
Corporate Inforrmation Security
Civic Engagement
Fifth Year Program
Entrepreneurship
Graduate Finance
General Business
International Business
Project Management
Enterprise Resource Management
Health Informatics
I/O Psychology-Occupational Health Psychology
MSIO - Organizational Psychology
MSIO - Industrial Psychology
Non-degree Rank I
Post MSN Nursing Education Certification
School Counseling 2- Temporary School Counseling Provisional Certification
School Counseling 3 - Standard Certification
Secure Software Engineering

## ADMISSIONS AND FINANCIAL AID

## ADMISSIONS

## APPLICATION FEE POLICIES

Paper applications for admission to the University must include a non-refundable $\$ 40.00$ application fee. Students applying on-line must submit a non-refundable $\$ 25.00$ application fee. The fee will be assessed for degree-seeking and non-degree-seeking students.

An applicant's fee waiver request will be considered by the admissions director in instances of financial hardship if the request is accompanied by a letter from

1. a high school counselor or principal;
2. a Talent Search counselor or Upward Bound official;
3. a member of NKU Student Support Services;
4. the State of Kentucky (Certification of Financial Assistance)
5. ACT/SAT application fee waiver request.

The applicant's request for a waiver and letter of recommendation for fee waiver must be submitted with the application for admission.

Students from the Greater Cincinnati Consortium of Colleges and Universities and the Southwestern Ohio Council for Higher Education are not charged the application fee.

An application for admission will not be processed until NKU receives the application fee or the fee waiver is approved. Correspondence regarding the application fee requirement will be sent to all applicants failing to submit the fee.

Alumni who have earned bachelor's degrees from NKU will have the application fee waived for post-bachelor's or graduate applications for admission. The application fee is also waived for spouses, or dependents of NKU faculty or staff who are eligible for a tuition waiver.

A student who has previously participated (beginning fall 2006) in the Early Enrollment or School Based Scholar program who is applying for admission to NKU immediately following graduation is not required to pay the application fee.

## CONFIRMATION FEE

All first-time degree-seeking freshmen and transfer students who are offered admission to NKU and enroll in six or more credit hours must confirm their intention to enroll and pay a nonrefundable $\$ 75.00$ confirmation fee

## ADMISSION DEADLINES

Admission deadlines and credential requirements are listed on the following page. To facilitate the admission decision, students are strongly encouraged to apply and supply all credentials by the priority deadline for each semester. All posted deadlines are final. Requests for an exception to the admission deadline will be reviewed by the admission director. All students who want to be considered for scholarship opportunities (for each fall semester) must submit all required admission materials by the scholarship deadline of February 1

## ADMISSION CLASSIFICATIONS FOR DEGREE-

 SEEKING STUDENTSFreshmen: Students who have not attempted coursework at a regionally accredited college or university (other than college courses earned while in high school). Final high school transcripts must be submitted upon graduation.

Transfer: Students who have attempted coursework for credit at a regionally accredited college or university. Students should be eligible to
return to their previous institution(s) at the time of application. See "Suspension" on page 31 if not eligible to return to previous institution. A transfer student with less than a 2.0 G.P.A. is strongly encouraged to submit all necessary credentials prior to the priority deadline listed on the following page. A student may be admitted on probation with approval by an appropriate dean of the student's major area. Students required to meet with a dean must have this meeting prior to the admission deadline date (see table below.) All necessary credentials for transfer students with a G.P.A. of 2.0 or higher admission must be submitted by August 1 for the fall semester, December 1 for the spring semester and May 1 for the summer semester. Transfers who do not submit all necessary credentials by the final deadlines may register as a non-degree student but will be ineligible to receive federal financial aid. If applicants choose to become degree-seeking during a subsequent semester, they must submit a new application for admission, an additional application fee, all required credentials, and must meet the deadline dates.

Readmission: For students who have attempted coursework at NKU but have not been enrolled during the four years preceding the semester in which the application is made to reenter the University. Admission standards in effect at first semester of entry will be applied. Graduation requirements will change to current-year catalog. Students who have been suspended must submit an undergraduate application no later than August 1 for the fall semester, December 1 for the spring semester, or May 1 for summer sessions. Students are required to meet with a dean must have the meeting prior to the admission deadline date. Refer to "Suspension" on page 31 for complete information. Readmission students with transfer credit must submit an official transcript with their application by August 1 for fall semester and December 1 for spring semester.

Post-bachelor: Students who have received a bachelor's degree and intend to enroll for additional undergraduate credit as degree-seeking.

Graduate: Students should request information from the Graduate Studies Office at 859-572-6364.

Home School and Independent Study: Students who are home schooled or completing their high school diploma through an independent study program must submit the credentials listed for freshman admission, except for the high school transcript from an accredited high school.

Additionally, the student must submit

1. a notarized statement from the home school teacher detailing the content of the student's home school curriculum, letter grades, and the duration of each course; and
2. final home schooled transcript must be submitted upon graduation.

The chart on the following page shows the different deadlines and credential requirements for degree-seeking students.

## ADMISSION DEADLINES AND CREDENTIAL REQUIREMENTS FOR DEGREE-SEEKING STUDENTS

|  | FRESHMEN | TRANSFER | READMISSION | POST-BACHELOR |
| :---: | :---: | :---: | :---: | :---: |
| DEADLINES FOR ADMISSION | Early Action <br> February 1 <br> Priority <br> May 1 <br> Final <br> August 1 | Early Action | Priority | Final |
| FALL SEMESTER |  | February 1 Priority <br> May 1 <br> Final <br> August 1 | $\begin{gathered} \text { May } 1 \\ \underline{\text { Final }} \\ \text { August } 1 \end{gathered}$ | August 1 |
| SPRING SEMESTER | $\begin{gathered} \text { Priority } \\ \text { November } 1 \\ \text { Final } \\ \text { Day before classes begin } \end{gathered}$ | Priority <br> November 1 <br> Final <br> December 1 | Priority <br> November 1 <br> Final <br> With transfer work December 1: otherwise Open Registration | Priority <br> November 1 <br> Final <br> Open Registration see Schedule of Classes |
| CREDENTIALS REQUIRED |  |  |  |  |
| Application Fee Official High School Transcript/GED Scores | $\begin{aligned} & \text { Yes } \\ & \text { Yes } \end{aligned}$ | Yes Yes (less than 24 semester hours transferred) | Yes Yes (unless previously sent) | Yes, unless NKU graduate No |
| Official American College Test (ACT), Scholastic Achievement Test (SAT), or COMPASS (writing, algebra, and reading scores) | Yes | Yes (less than 24 semester hours transferred) | Yes (unless previously sent) | No |
| Official College Transcript(s) from each institution attended | Yes | Yes | Yes | Yes (indicating Bachelor's degree) |

## ADMISSION CLASSIFICATIONS FOR NON-DEGREE SEEKING STUDENTS

Students who initially apply as non-degree and re-apply as degree seeking are held to the current academic policies and admission standards.

Early Enrollment: Students in high school who wish to enroll for courses at NKU's Highland Heights campus. A 3.25 (on a 4.0 scale) high school GPA, an ACT composite of 20 or above or SAT composite of 1020 or above and permission from the guidance counselor are required for admission. Interested students should contact the Office of Admissions for additional information and an Early Enrollment application. A student who has attended NKU previously as an early-enrollment student must resubmit a completed and approved Permission to Enroll Form for each subsequent term for which he/she desires to enroll as an early enrollment student. If the student wishes to become degree-seeking, he/she must submit a new application for admission and the required credentials for freshman admission. The application fee is waived for an early enrollment student who applies to NKU immediately following graduation from high school. Note: Enrollment generally is restricted to seniors with exceptions permitted for non-seniors enrolled in "advanced" high school courses in mathematics (calculus or above), the sciences (second year of physics, chemistry, or biology), or foreign languages (third-year or above). Application available at: http://www.nku.edu/~admitnku/Early Admission Students.htm.

School Based Scholars Program: Students can earn up to 12 college level credit hours taking classes at a high school, the Covington Campus, or the Grant County Center for a reduced rate of $\$ 125$ per class (does not include the cost of textbooks). Classes are taught by NKU professors. For more information on the program, see: http:// edoutreach.nku.edu/School-Based Scholars Program.html. The applica-
tion fee is waived for a school based scholar student who applies to NKU immediately following graduation from high school.

Non-Degree: Students who do not intend to enter a degree program at the time of application. Student must have a high school diploma or GED. A maximum of 36 semester hours earned as a non-degree seeking student may be applied to a degree earned at NKU. Non-degree students are not eligible to receive federal financial aid or veteran's benefits. Students may request academic advising from the Academic Advising Resource Center. (AARC). Students who choose to become degree-seeking at a later date must submit a new application for admission, pay an additional application fee, submit all required credentials, and must meet the appropriate admission deadline. Admission deadlines and credential requirements are listed below. Students are strongly encouraged to apply and supply all required credentials by the priority deadline for each semester to facilitate the admission process. Requests for an exception to admission deadline will be reviewed by the admissions director.

Post-Bachelor: Students who have received a bachelor's degree and intend to enroll for additional undergraduate credit as non-degree seeking.

Visiting (Transient): Students who attend another college or university, but wish to enroll at NKU for one semester. Students are responsible for having coursework approved by the institution to which the work will be transferred. Visiting students, except for ones who enroll through the Greater Cincinnati Consortium of Colleges and Universities, may not enroll at NKU for more than one consecutive semester. Summer terms are not considered a consecutive semester.

## CREDENTIAL REQUIREMENTS FOR NON-DEGREE-SEEKING STUDENTS

Non-degree students are not eligible to receive veteran’s benefits or federal financial aid. Non-degree students are eligible for academic advising and may be eligible for alternative forms of financial aid. Contact Financial Assistance at 859-572-5143 for other options. If these applicants choose to become degree-seeking at a later date, they must submit a new application for admission, an additional application fee, all required credentials, and must meet the appropriate deadline dates.

| CREDENTIALS REQUIRED | EARLY ENROLLMENT/ <br> SCHOOL BASED <br> SCHOLARS | NON-DEGREE | POST-BACHELOR | VISITING |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Application and Application Fee | Yes | Yes | Yes | Yes <br> (No fee if consortium) |  |
| Early Admit Form | Yes* | No | No | No |  |
| Official High School Transcript | Yes | No | No | No |  |
| Official College Transcripts | No | No - unless needed for <br> pre-requisite | No - unless needed for <br> pre-requisite | No - unless needed for <br> pre-requisite |  |
| ACT or SAT Official Score Report | Yes | No - unless needed for <br> pre-requisite | No - unless needed for <br> pre-requisite | No - unless needed for <br> pre-requisite |  |
| Deadline for Admission | Fall Final - August 1 <br> Spring Priority - December 1 <br> Winter Priority - December 1 <br> Summer - May 1 | Fall Final - August 1 <br> Spring Priority - December 1 <br> Winter Priority - December 1 <br> Summer - May 1 | Fall Final - August 1 <br> Spring Priority - December 1 <br> Winter Priority - December 1 <br> Summer - May 1 | Fall Final - August 1 <br> Spring Priority - December 1 <br> Winter Priority - December 1 <br> Summer - May 1 |  |
| *See application fee statement above. |  |  |  |  |  |

## ADMISSION CLASSIFICATIONS FOR INTERNATIONAL STUDENTS AND PERMANENT RESIDENTS

International Students (Non-Immigrant F-1 Status): Students should apply with the International Admissions Office (University Center 366) at least six months before the beginning of the semester for which they wish to enroll. In general, applicants will be admitted only after they have documented that they have acceptable academic credentials, are competent in English, and verify that they have access to funds sufficient to meet the costs of completing their studies. In addition, a tuition deposit may be required of certain students; the SAT exam may be required from students from certain countries depending on U.S. consulate procedures. In either case, those individuals will be so advised by the University.

Specific credentials required:

1. international application for undergraduate admission;
2. declaration and certification of finances;
3. official transcripts of secondary work (or appropriate certificates of examination) AND certified English translations if applicable;
4. an official transcript from each college or university attended AND certified English translations if applicable;
5. all applicants with undergraduate foreign transcripts must have those transcripts evaluated course by course by an approved Foreign Education Evaluation Service. These must be submitted along with the original or certified copy of your foreign transcripts in order for any transfer credit to be awarded. Please contact the Office of International Student Affairs for a list of approved Services at www.@nku.edu/~isa., e-mail isa@nku.edu or call 859-572-6517; and
6. all non-native speakers of English studying at NKU must prove English Proficiency. Any one of the following will satisfy the English Proficiency requirement for admission:
a. submit an official score report of the Test of English as a Foreign Language (TOEFL) taken within the last two years. The minimum TOEFL scores to be considered for admission are: computer based-173 or paper-based-500 or internet-based-61;
b. present documentation of having satisfactorily completed Freshman Composition I at an American college in the U.S. and have an overall acceptable grade point average. Non-native speakers of English may still be asked to take the TOEFL if it has been several years since taking the English courses and/or if the student has returned to his/ her home country;
c. present documentation of having successfully completed Level 109 at an ELS Language Center in the U.S.;
d. submit a score on the verbal portion of the ACT or SAT taken within the last two years. The minimum scores to be considered for admission are: ACT—18 or SAT-480; or
e. submit an official score from the International English Language Testing Service (IELTS) taken within the last two years. The minimum IELTS scores to be considered for admission are: Band of 5.0.
If the student's primary language is not English and the student is seeking to maintain or obtain F-1 immigration status, the student must do at least one of the above to be considered for admission. After acceptance and upon arrival at NKU, international undergraduate students may be required to take an English placement test on NKU's campus (Michigan Test).

Undergraduate students who have presented documentation b. or d. above or those who have presented documentation showing that they meet or exceed the graduate level requirement in a. or e. above are not required to take any additional English placement tests prior to registration, but the individual department may request that the student do so.

International Students (Non-Immigrant, Non F-1 Status): Students should apply with the International Admissions Office (UC 366) by submitting an international student application (if applicable), transcripts as described in section for Non-Immigrant F-1 Status students, and meet the English proficiency requirements as described above.

Permanent Residents: Students should apply through the International Admissions Office (UC 366) and meet the foreign transcript and English proficiency requirements as set out in Non-Immigrant F-1 Status student section, in addition to all domestic admissions requirements. Undergraduate permanent residents and certain other visa types ( $\mathrm{H}-1, \mathrm{H}-$ 4, L-1, L-2, F-2, E1, E2, M-1, J-2 or TN) including U.S. citizens whose primary language is not English should file the standard application for admission and will be required to take the NKU-administered Michigan Test of English Language Proficiency. In this case, unless the student has presented documentation of a., b., c., d., or e. above, the Michigan Test is a requirement in order to be considered for admission. The application for admission must be on file in order to take the Michigan test and have the scores processed. Please note that if admission is denied because the Michigan Test score is too low, the application fee cannot be refunded. Exceptions to the Michigan Test requirement for undergraduate students

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in this category are the same as those seeking F-1 student status. See above.

## Exchange Students (Non-Immigrant J-1)

The Office of International Programs (OIP) receives the notification of their selection as an NKU exchange student from their home institution. OIP then begins the J- 1 visa process and collects all application materials which is then forwarded to the International Admissions Office.

International Transfer Applicants: Students must submit an official foreign evaluation processed by an NKU approved transcript evaluation company. Students must also submit certified English translations if applicable. Please contact International Student Affairs (UC 366) at 859-572-6517 or see www.nku.edu/edu/~isa for more information.

## SELECTIVE ADMISSION PROGRAMS

Admission to the University does not ensure acceptance into the following selective admission degree programs. Students interested in applying to these programs should contact the School of Nursing and Health Professions or College of Education and Human Services for program application materials. Students must be accepted for admission to the University and submit the selective application and necessary credentials by the following deadlines for each selective program:

## School of Nursing and Health Professions <br> Nursing <br> $$
\text { January } 31
$$ <br> Radiologic Technology February 15 (priority) <br> Respiratory Care <br> February 15 (priority) <br> Bachelor of Health Science at Cincinnati Children's Medical Center

Fall August 1
Spring December 1
Summer May 1
College of Education and Human Services
Athletic Training
October 31
Several other programs at NKU practice selective admissions but do not require an application. These programs admit students as pre-majors or undeclared until they have met program requirements.

## ACCEPTANCE TO THE UNIVERSITY

Northern Kentucky University has implemented admission standards which will limit the number of students accepted. Therefore, it is recommended that you apply for admission early. Because an admission decision cannot be made until the application fee, all transcripts, and/or national test scores have been received, it is in your best interest to submit these materials and your application for admission by February 1 for fall semester and November 1 for spring semester enrollment.

## KENTUCKY PRE-COLLEGE CURRICULUM

The Kentucky Pre-College Curriculum (PCC) is defined by the Kentucky Council on Postsecondary Education (CPE) as a prescribed set of high school courses required for admission to an associate or baccalaureate degree program at a Kentucky public institution. Students under 21 years of age or transfer students with less than 24 transferable semester credit hours must complete the PCC to apply for admission as degreeseeking students. According to the CPE, the PCC better prepares students for college-level work and reflects high school graduation requirements. All out-of-state students must adhere to PCC requirements. Students who are admitted to the University must complete courses to remediate all deficiencies. Specific courses have been designed to remediate PCC deficiencies in math, English, and foreign language areas.

A student with a PCC deficiency who has an ACT or SAT score in the top $60 \%$ nationally for English, mathematics, or science subject areas will not be judged to have a PCC deficiency in these areas.

| Pre-CoLLEGE CURRICULUM |
| :--- |
| English/Language Arts - $\mathbf{4}$ credits required |
| Mathematics - $\mathbf{3}$ credits required <br> Algebra I <br> Geometry <br> Algebra II <br> (see note below on substitutions) |
| Science - $\mathbf{3}$ credits required <br> Credits to include life science, physical science and earth/space science <br> (at least one lab course) |
| Social Studies - $\mathbf{3}$ credits required |
| Health - 1/2 credit required |
| Physical Education - 1/2 credit required |
| History and Appreciation of Visual, Performing Arts - 1 credit required <br> History and appreciation of visual and performing arts or another arts <br> course that incorporates such content |
| Foreign Language - 2 credits required or demonstrated competency in <br> the same foreign language |
| Electives - $\mathbf{5}$ credits required (3 rigorous) <br> Recommended strongly: 1 or more courses that develop computer literacy |
| Total Credits - 22 |
| A student may substitute an integrated, applied, interdisciplinary, or higher- <br> level course within a program of study if the substituted course offers the same <br> or greater academic rigor, and the course covers or exceeds the minimum <br> required content. <br> Rigorous electives should have academic content at least as challenging as that <br> in courses required in the minimum high school graduation requirements. These <br> electives should be in social studies, science, math, English and language arts, <br> art and humanities, foreign language, and, above the introductory level, in agri- <br> culture, industrial technology, business, marketing, family and consumer sci- <br> ences, health sciences, and technology education and career pathways. Electives <br> in physical education and health are limited to one-half unit each. |

## STATUS OF ADMISSIONS

As part of the admission process, the Office of Admissions evaluates a student's admission status for every degree-seeking freshman and for students who are transferring to NKU with fewer than 24 semester hours. The purpose of this evaluation is to determine the student's preparation for college level coursework. The evaluation focuses on meeting the PreCollege Curriculum (PCC) high school coursework in all areas but especially the student's high school coursework in English, mathematics, reading, science, social studies and foreign language. Also evaluated are the highest ACT, SAT or COMPASS exam scores, college transcripts, and high school Grade Point Average (GPA) and/or class rank. These areas are evaluated to determine if the student meets the minimum requirements set forth by Northern Kentucky University and the Kentucky Council on Postsecondary Education.

## ADMISSION STATUS

Students are admitted to NKU in one of the following two categories: regular admission or admission with conditions.

## Regular Admission Requirements:

A. Graduate from an accredited high school with a minimum cumulative high school grade point average of 2.0 on a 4.0 scale (high school rank of top $60 \%$ will be accepted in lieu of the 2.0 GPA requirement); or

1. receive a general equivalency diploma; or
2. complete an approved home-school or distance learning high school program.
B. Achieve a minimum ACT composite score of 20, English, Math, Reading subject scores of 18 or above, or minimum SAT
composite score of 940 or higher with Math 430 and Reading 480.
C. Complete the Kentucky Pre-College Curriculum
D. Submit the official copy of the final high school transcript or GED exam results.
E. Submit official copies of all college transcripts (if applicable).

## Admission with Conditions:

Admission with conditions may be granted to students who do not meet the current criteria for regular admission. Conditionally admitted students may be required to take a limited course load for their first semester, must participate in one academic support program, and achieve academic good standing at completion of their initial semester with no grade below a $C$.

The limited course load and mandatory academic support may be continued if students are not in good standing after their initial semester. Conditionally admitted students may be ineligible to declare a major.

## Students not Admitted

Students with three or more ACT or PCC deficiencies will not be admitted unless they have a high school grade point average of 3.0 or higher or have a class rank in the top 30 percent. Applicants who do not meet the standards have the opportunity to be admitted with conditions if they apply and successfully complete the NKU academy.

## NKU ACADEMY

The NKU Academy is designed specifically for first-time undergraduate students who would not otherwise be admitted to Northern Kentucky University. NKU Academy scholars will be identified from those applicants who have not met our requirements for admission, yet are deemed capable of developing the knowledge, skills, and habits necessary for success in college. Admitting these students through the NKU Academy enhances access to higher education as well as the likelihood for student success.

NKU Academy scholars engage in a rigorous 5 -week summer program that includes a choice of two courses from the following: Reading Workshop (LAP 091), Writing Workshop (ENG 090), and either Beginning Algebra (MAH 095) or Basic Mathematical Skills (MAH 090) as well as one credit hour of UNV 101 Orientation to College and Beyond. In addition to daily classes, participants will also:

- Attend daily academic assistance sessions
- Attend required peer tutoring sessions
- Develop study habits and interpersonal skills
- Begin the process of career exploration
- Have regular contact with caring faculty and staff
- Meet with academic advisors to plan a course of study
- Engage in activities designed to familiarize them with campus facilities and resources
- Have fun and make friends

NKU Academy participants who meet all requirements of the program become eligible to continue as degree-seeking students in the fall semester. Students will continue receiving support to facilitate their success in their first college year.

To be considered for the program, individuals are encouraged to apply by March 1st. Space in the program is limited. For more information, contact The Office of First-Year Programs, phone 859-572-5913.

## PRE-COLLEGE CURRICULUM NECESSARY FOR PLACEMENT

| FALL 2007 |  |
| :--- | :---: |
| English- 4 credits | English I, II, III, and IV or AP English |
| Mathematics - 3 credits | Algebra I, II and Geometry * see below <br> for substitutes |
| Foreign Language (2004)-2 credits | 2 credits of same foreign language** <br> see below |

Students deficient in Pre-College Curriculum are required to take college-level courses in deficient areas. There are no challenge tests for PCC deficiencies.
*A student may substitute an integrated, applied, interdisciplinary, or higher-level course within a program of study if the substituted course offers the same or greater academic rigor and the course covers or exceeds the minimum required content.
**All students entering Northern Kentucky University in or after the fall semester of 2004 who graduated from high school in the spring of 2004 or later and whose high school transcripts do not indicate that they either met or were exempted from the pre-college foreign language admission requirement must remove their admissions deficiency by completing one semester of a foreign language sequence offered at NKU. The course taken to remove the foreign language deficiency will also count toward fulfillment of the language option of the general education humanities requirement.

## ADMISSION WITH CONDITIONS COURSE-TAKING POLICY

Students with any academic deficiency, ACT/SAT or Pre-College Curriculum, will be required to enroll each semester in at least one course that fulfills an academic deficiency until all academic deficiencies are successfully completed.

Students must successfully complete all academic deficiencies prior to completing 45 earned hours. Should students fail to complete all academic deficiencies by 45 earned hours, they will not be permitted to continue enrollment at NKU. Students may attend another college to take courses which meet their academic deficiencies and then later return to NKU to finish their degree.

## TEST SCORES, COURSE ASSIGNMENTS, AND CHALLENGE TESTS

| ACT sCores taken after 10/89 |  | Course Assignment | Challenge Testing |
| :--- | :---: | :---: | :---: |
| English | 18 or higher | ENG 101 - College level English | No testing required |
|  | 15,16 , or 17 | ENG 090 | Eligible for challenge test |
|  | 14 or below | ENG 090 | For instructions see http://www.nku.edu/~testing |

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## NORTHERN EXPOSURE: NEW STUDENT ORIENTATION PROGRAM

The New Student Orientation Program is mandatory for traditional undergraduate first-time students. The program is designed to initiate an enduring connection between the students, their families, and the NKU community. Through interactive experiences, students will become informed and skilled consumers of academic programs and comprehensive services offered by NKU. The two-day, one night, program will allow students to become familiar with academic departments, register for classes, and learn about the variety of services and leadership opportunities available to them as an NKU student. Invitations will be sent to students based on their acceptance date and receipt of confirmation fee. Students are encouraged to attend an early Orientation Program to take advantage of the best selection of available courses.

In addition to the two-day, one night, program, transfer and non-traditional students will have the option to attend a half-day Orientation Program which highlights academic and student support services. Advising and course registration takes place directly within the student's major department. It is not included as part of the transfer/non-traditional student orientation program.

For more information, dates, and schedules of the programs, please log onto the orientation website at http://www.nku.edu/~orientation, or contact the Assistant Dean of Students for Student Orientation and Parent Programs at 859-572-1967.

## NKU'S TRANSFER ADMISSION AND CREDIT POLICIES

It is the official policy of NKU that transfer students must submit their official transcripts from all regionally accredited institutions they have previously attended. NKU begins the admissions process for transfer students after an application is completed, and application fee is paid, and after transcripts are received from all previously attended institutions. Transfer students currently enrolled in courses at any post-secondary institution (not NKU) will have one semester in which to provide final, official transcript(s) showing all grades/credits earned.

## What coursework will transfer?

Once all official transcripts are received, NKU completes a course-by-course evaluation of a student's transfer coursework. Only coursework from a regionally accredited institution or an institution that has a formal articulation agreement with NKU is evaluated to award transfer credit. If transfer credit is awarded, all grades including $D$ 's and $F$ 's will be included in the NKU cumulative GPA. Courses that are considered remedial or a duplication of credit will not be awarded transfer credits. Students are not awarded transfer credit for course repeats with a grade of $C$ or better. (This policy will change beginning fall 2009, check with the transfer office or registrar for more information.)

## How will my GPA transfer to NKU?

Incoming GPA's will be re-calculated based on NKU's line-by-line evaluation of coursework and NKU's policies and procedures.

## How is the transcript evaluated?

NKU completes a course evaluation of all incoming transfer coursework. Once evaluations are complete, a student is sent a "Transfer Credit Evaluation" which shows how his/her coursework was accepted at NKU. Once admitted to NKU, transfer students can access Norse Express, "Real-Time Degree Audits" to view how transfer credits will apply to the major/minor and/or general education requirements. First-time transfer students must consult with an academic advisor before registering for classes.

## Articulation Agreements

Students should note on their admission application if they are following an articulation agreement from any institution with which NKU has a formal articulation agreement. Students should alert their academic advisor if following a formal approved articulation agreement.

## Suggestions for Transfer Students

1. An official transcript should be sent that includes coursework completed up to application date. Transfer students currently enrolled in courses at any post-secondary institution (not NKU) will have one semester to provide a final, official transcript showing all grades/credits earned.
2. Students who attend a college/university and whose coursework is more than five years old, should also submit course descriptions or a catalog from that year in order to expedite the evaluation process.
3. Only official transcripts from regionally accredited institutions or institutions with approved articulation agreements will be evaluated for transfer credit.
4. It takes time to accurately evaluate transcripts. Allow at least three weeks for the evaluation of credentials.
5. Students should request that the Kentucky Transfer Policy (KTP) certifications be included on official transcript.
6. Students with Military, CLEP or AP credit should submit their official transcripts to the Office of the Registrar. Students with coursework from the Community College of the Air Force should submit official transcripts to the Office of Admissions.
7. Students interested in declaring academic bankruptcy should consult the "Bankruptcy Policy" on page 31 for more information.

## REGISTRATION VIA NORSE EXPRESS

Norse Express - http://express.nku.edu
Hours: Monday-Friday 7:30 am-10:00 pm

$$
\text { Weekends } \quad \text { 9:00 am Saturday - midnight Sunday }
$$

For additional information contact the Registrar's Office.
Lucas Administrative Center 301
http://www.nku.edu
Fax: 859-572-6094
E-mail: registrar@nku.edu
Students have remote access to their NKU accounts via Norse Express, a web-based system. Information/services available include: bursar account summary, grades, class schedules, course descriptions, class section availability, credit card payment, official and unofficial transcripts, degree audits, and course registration/drop/add. To access the web-based portion of Norse Express, you must have the latest versions of MS Internet Explorer (5.0 and above) or Netscape Navigator (4.5 and above).

Prior to registering for classes, many students are required to consult with an academic advisor. Consult the Schedule of Classes for requirements.

Students not in good academic standing will not have access to register through Norse Express (web). Students on academic probation must first see their academic advisor. After obtaining registration approval from their academic advisor, student on academic probation MUST receive approval from their academic dean's office prior to attempting to register for classes. NO EXCEPTIONS.

Students advised by the Academic Advising Resource Center (AARC) obtain their "dean's approval" from AARC.

## FEE PAYMENT VIA BURSAR OPERATIONS

Lucas Administrative Center 235
859-572-5204
Fax: 859-572-5566
http://access.nku.edu/bursar/
Bursar Operations, located on the second floor of the Lucas Administrative Center, is responsible for assessment and collection of student tuition and fees. In addition, the office provides a check cashing service to all faculty, staff, and students. Hours are posted outside of the office.

## VEHICLE REGISTRATION/PARKING OFFICE

## 419 Johns Hill Road

859-572-5505
Every motor vehicle operated or parked on the Highland Heights campus or Covington campus of Northern Kentucky University must be registered via Norse Express for Students at www.nku.edu. Vehicle registration at either location is valid for both campuses. The cost of a student parking permit is subject to change; consult current Schedule of Classes. Parking regulations may be viewed online at: http://access.nku.edu/dps/ campus_links/ParkingReg.htm. Questions pertaining to vehicle registration should be addressed to the Parking Office.

## ADMISSION: STUDENTS OVER 65 (DONOVAN'S SCHOLARS)

Kentucky residents 65 years of age or older may, without payment of application fees or tuition, pursue credited coursework at Northern Kentucky University for a degree or for personal enrichment. Non-credited courses are not included in this benefit. Upon applying for admission, students must submit proof of age.

## RESIDENCY

Students are notified of their residency status when they are admitted to the University. Residency status is determined in accordance with the Council on Postsecondary Education's Classification of Residency for Admission and Tuition Assessment Purposes. This policy can be found under "KENTUCKY RPOLICY" on page 262 of this catalog. Students who wish to appeal the initial determination of residency for tuition purposes may request a residency affidavit from the Office of the Registrar to initiate this process.

## ON-CAMPUS HOUSING REQUIREMENT

Unless qualifying for an exemption, new freshman students will be required to live on campus. Additional information regarding this requirement may be obtained on the web at http://access.nku.edu/housing or by contacting University Housing at 859-572-5676.

## HOUSING

Norse Commons 101
859-572-5676
Fax: 859-572-6099
housing@nku.edu
www/nku.edu/~housing
University Housing provides housing services for single students who live on-campus during the school year. The facilities contain traditional residence hall rooms as well as apartment-style living, lobby areas,
information desks, computer lab, televisions, vending areas, loft/study areas, and space for student recreation. The Residential Housing Association (RHA) represents resident students to the Office of University Housing and to the Student Government Association. RHA serves as a sponsor of Residential Village events and reviews and recommends University policy changes.

To be eligible for student housing, you must be a regularly enrolled student with a minimum of 12 credit hours at Northern Kentucky University or KCTCS Gateway Community and Technical College. Special approval may be granted by the Director of Housing for students who are enrolled in 6 or more credit hours at NKU or Gateway. Consideration will be based on GPA, ACT, and academic progress.

## FINANCIAL AID AND SCHOLARSHIPS

## FINANCIAL AID APPLICATION

You must complete the Free Application for Federal Student Aid (FAFSA). The Title IV code for NKU is 009275.

The FAFSA can be completed using the internet at www.fafsa.ed.gov.

Students who wish to apply for a summer term should contact the NKU Office of Student Financial Assistance for a summer application. Email ofa@nku.edu.

## SCHOLARSHIPS

Scholarships available at Northern Kentucky University are awarded on the basis of academic excellence and/or artistic talent. For a complete listing of all undergraduate scholarships at Northern Kentucky University, view the scholarship listing at www.nku.edu/~ofa. The scholarship application deadline is February 1 of the academic year. Students who wish to be considered for scholarships must also complete the admissions application requirements by February 1.

## INTERNATIONAL STUDENTS

International students are not eligible for Federal financial aid. International students maybe eligible for University-sponsored scholarships listed on the financial assistance website at http://www.nku.edu/~ofa/. Please note any citizenship or residency requirements.

## COMMUNITY SERVICE

Students eligible for the Federal Work-Study program have the opportunity for employment in designated community service positions. The community service positions are both on and off-campus and range from childcare development to tutoring in schools.

## APPLICATION PRIORITY DATES

To be considered for aid for the academic year or for fall semester only, SUBMIT THE REQUIREMENT FORM BY MARCH 1.

Applications submitted after the priority date will be considered if funds are available.

| TERM | PRIORITY DATE |
| :--- | :---: |
| Fall Semester | March 1 |
| Spring Semester | November 1 |
| Summer | February 1 |

Complete the application form correctly-errors will delay the processing and could affect eligibility for receiving assistance.

## AWARD NOTIFICATION

If you submit your application materials on time and according to the instructions, you will receive notices from three different sources: the federal government, the Kentucky Higher Education Assistance Authority (KHEAA), and NKU.

The federal government will send you a Student Aid Report (SAR) informing you of your eligibility for a Pell Grant.

KHEAA will send you a notice indicating your eligibility for a KHEAA CAP Grant. Receipt of this notice does not guarantee that you are eligible for the KHEAA CAP Grant to attend NKU.

NKU will notify you once your financial aid award has been posted to Norse Express. This will include an estimate of your Pell Grant and KHEAA CAP Grant and any other financial aid for which you are eligible (i.e. student loans, etc.). Some financial aid awards will be made before residence hall assignments; thus, your financial aid award may not reflect true expenses for the academic year. If you feel that you may fall in this category, please contact our office in person (preferable) or in writing after you receive your residence hall assignment.

It is important for you to understand that all financial aid awards are dependent upon institutional, private, state, and/or federal funding. Although we fully intend to be able to adequately fund any commitments which are made to you, circumstances can change. Notification of any change to financial aid awards will be sent to the student.

Remember, even if you are notified you are ineligible for a Pell Grant or KHEAA CAP Grant, you may be eligible for assistance through other aid programs. Various types of financial aid to NKU students can be found on the financial aid website at www.nku.edu/~ofa/.

If you want additional information concerning the financial aid process, please contact the Office of Student Financial Assistance, AC 416, or visit our web site at www.nku.edu/~ofa/ or e-mail at ofa@nku.edu.

## TUITION AND FEES

## BURSAR OPERATIONS

Bursar Operations, located on the second floor of the Lucas Administrative Center, is responsible for assessment and collection of student tuition and fees. Hours are subject to change as necessary; see directory the outside the office or website at: http: access.nku.edu/bursar.

In addition, the office provides a check-cashing service to all faculty, staff, and students.Tuition rates and mandatory fees are approved by Northern Kentucky University's Board of Regents. Tuition rates do not include parking fees or specific course/lab fees.

## TUITION RATES

For 2008-2009 Tuition Rates see NKU website:
http://access.nku.edu/bursar/

## FEES 2008-2009

## Application Fee

Paper applications for admission to the University must include a non-refundable $\$ 40.00$ application fee. Students applying on-line must submit a non-refundable $\$ 25.00$ application fee. The fee will be assessed for degree-seeking and non-degree-seeking students.

## Audit Fee

Individuals auditing a course are charged the same tuition and fee assessment as though they were taking the course for credit.

## Auto Registration Fee

An auto registration fee is charged to students who park on campus.

## Confirmation Fee

All first-time degree-seeking students who are offered admission to NKU and enroll in six or more credit hours must confirm their intention to enroll and pay a nonrefundable $\$ 75.00$ confirmation fee.

## Course Fees

Certain courses as noted in Schedule of Classes have fees attached. Fee depends on course.

## Late Registration

A $\$ 25.00$ late registration fee will be assessed for all students who register during late registration.

## Music Fee

In addition to the appropriate tuition charge, an additional fee is charged per $1 / 2$ hour lesson each week for a semester. Fee is assessed for private instruction in applied music.

## HOUSING RATES 2008-2009

For housing options and rates, see NKU website: http:// access.nku.edu/housing.

## TO BE ELIGIBLE FOR STUDENT HOUSING, YOU MUST BE A REGULARLY ENROLLED FULL-TIME STUDENT.

## TUITION AND FEES PAYMENT

Before a student will be permitted to register, any prior financial obligations to the University must be paid in full.

## REGISTRATION AND PAYMENT DUE DATES

Full payment of tuition and fees is due by the published date of each term. Students not paying in full by the due date will be charged a late fee.

To avoid a financial obligation to the University or a grade liability, class withdfrawal must be processed by the end of the $100 \%$ adjustment (refund) period for each term or session.

If an account remains unpaid and is referred for collection, the student is liable for all attorney's fees and related costs and charges incurred by NKU for collection of the obligation.

## FINANCIAL AUDIT

Fee assessments are subject to audit at any time throughout the academic career of the student. A student who does not pay the additional sum assessed (e.g., a change in residency or addition of courses) after notification of the additional charges will be placed on hold, preventing the student from obtaining transcripts and other services. If a student's account remains unpaid and is referred for collection, the student is liable for all attorney's fees and related costs and charges incurred by the University for collection of the obligation.

## FINANCIAL AID RECIPIENTS

Students receiving financial aid may obtain a temporary deferment of tuition and fees if the financial aid process is complete. At the time financial aid checks are distributed, the bursar will deduct any balance due the University.

## REFUNDS -UNIVERSITY POLICY *

- Students officially withdrawing from all courses on or before the last day to register are eligible for $100 \%$ adjustment of assessed tuition. Students dropping courses on or before the last day to register, reducing their course load from full-time to part-time status, are entitled to a $100 \%$ adjustment of tuition for the courses dropped.
- Students officially withdrawing from all courses after the last day to register but through the last day to drop a course without a grade appearing on the student's record are eligible for a $50 \%$ adjustment of assessed tuition. Students dropping courses during this period, reducing their course load from full-time to part-time status, or further reducing their part-time status, are entitled to a $50 \%$ adjustment of tuition for the courses dropped.
- Refund appeals, based on extraordinary circumstances, must be made in writing to the Director of Bursar Operations no later than midpoint of the session. See website for form.To view full description of the refund policy, check the following website: http:// access.nku.edu/bursar.


## ACADEMIC REQUIREMENTS

## GENERAL REQUIREMENTS

## 1. Bachelor's Degree

A student working toward a bachelor's degree at Northern Kentucky University must fulfill the following requirements:
a. Minimum of $\mathbf{1 2 8}$ semester hours, the last 30 of which must be taken at NKU (i.e., in residence).
b. Minimum of $\mathbf{2 5 \%}$ of the semester hours required for a degree must be taken at NKU (i.e., in residence)
c. Developmental Coursework (if required) must be satisfied. See "ADMISSION STATUS" on page 12.
d. General education requirements (see "GENERAL EDUCATION REQUIREMENTS: BACHELOR'S DEGREE" on page 19). Please note that some transfer students may be credited with fulfillment of part or all of these requirements under provisions of the Kentucky General Education Transfer Policy (see "KENTUCKY GENERAL EDUCATION TRANSFER POLICY" on page 25).
e. Major requirements.
f. Minor or Area of Concentration (secondary area of study). A student must complete (i) an academic minor in a discipline outside his/her major discipline or in an interdisciplinary program offered by NKU; or (ii) an academic area of concentration consisting of at least 12 upper division semester hours in a discipline that is different from the student's major; or (iii) a second major offered by NKU; or (iv) a minor included within the major where the student is exempted from the minor/area of concentration requirement. Please see appropriate individual program requirements for exempted programs.
g. Grade point average (GPA) of at least 2.00 on all work attempted at NKU, at least 2.00 on all college work attempted (excluding developmental coursework), and at least 2.00 in the major, minor, area of concentration (secondary area of study)unless otherwise specified in the program requirements.
h. Forty-five semester hours of successfully completed coursework at the 300-level or above successfully completed coursework are required of all bachelor's candidates. Even though freshman and sophomore level courses completed at other institutions may have course titles and/or content similar to certain upper division courses at NKU, the Office of the Registrar will make the determination of equivalencies for acceptance toward fulfillment of this requirement.
i. During the first 30 college-level hours, a student pursuing a bachelor's degree will demonstrate competency in written and oral communication through successful completion of College Writing (ENG 101) or Honor's English (ENG 151) and Principles of Speech Communication (CMST 101).
j. Demonstration of competence in computer use as determined by the student's major department.

## 2. Associate Degree

A student working toward an associate degree at Northern Kentucky University must fulfill the following requirements:
a. Minimum of $\mathbf{6 4}$ semester hours, the last 20 of which must be taken at NKU.
b. Developmental Coursework (if required) must be completed.
c. General education requirements (see "GENERAL EDUCATION REQUIREMENTS: ASSOCIATE DEGREE" on page 25.
d. Major requirements.
e. Grade point average (GPA) of at least 2.00 on all work attempted at NKU, at least 2.00 on all college work attempted
(excluding developmental course work), and at least 2.00 in the major-unless otherwise specified in program requirements.
f. During the first 30 college-level hours, a student pursuing an associate's degree will demonstrate competency in written and oral communication through successful completion of College Writing (ENG 101) or Honor's English (ENG 151) and Principles of Speech Communication (CMST 101).

## GENERAL EDUCATION PROGRAM RATIONALE

At the base of the general education program is a common core of foundation skills in critical thinking, mathematical reasoning, and written and oral communication, which are fundamental to success in further intellectual endeavor. The liberal arts core of the general education program aims to broaden intellectual horizons, deepen understanding of artistic, humanistic, and scientific methods, develop the mental flexibility and openness to change that allow adults to cope with complexity and meet unforeseen challenges in their careers and lives. The diversity core aims to broaden a student's knowledge and understanding of society's diverse social and cultural perspectives that are fundamental for living in a modern society. General education courses seek to further students’ understanding of the contemporary world, of the ideals and aspirations which have motivated human thought and action throughout history, and of their society's place in a larger human context.

At the same time, the general education program encourages students to take personal responsibility for their lives by developing their own sense of values, pursuing their own goals, and developing the habit of lifelong learning, so that they may make valuable individual contributions to the political, social, and cultural enrichment of their society.

## GENERAL EDUCATION PROGRAM AREAS OF EMPHASIS

Writing and Reading Skills: Students will use writing and reading effectively as a means of learning, critical thinking, and communication.

Oral Communication: Students will demonstrate effective skills and techniques of public oral communication.

Quantitative Skills and Scientific Understanding: Students will apply quantitative skills and scientific understanding toward a range of issues and problems commonly encountered across the curriculum and throughout their lives.

Critical Thinking and Problem-Solving Skills: Students will develop a broad range of critical thinking and problem-solving skills in the scientific, mathematical, social, artistic, and personal domains.

Collaboration with Others: Students will work effectively and responsibly in collaboration with others.

Computer and Information Literacy: Students will employ computer skills that are relevant to their success in college and beyond. Students will gain access to critically evaluate, formulate, and use information effectively and ethically.

Diversity: Students will recognize and respect similarities and differences between their own and other peoples cultures, races, genders, abilities, religions, and ethnicities.

Historical and Cultural Perspectives: Students will comprehend the variety and interdependence of the world's cultural, economic, political, social, and ecological systems, and their change over time.

Values Appreciation: Students will comprehend the variety of situations of ethical import of both a personal and public nature in the contemporary world.

Aesthetic Appreciation: Students will demonstrate an understanding and appreciation of the creative process and artistic works.

## GENERAL EDUCATION REQUIREMENTS: <br> BACHELOR'S DEGREE (Please refer to table below.) NOTES ON GENERAL EDUCATION REQUIREMENTS

a. Enrollment in certain general education courses is limited to students who have met prescribed academic qualifications (such as a level of performance on ACT or placement examinations) and/or who have completed specified prerequisite courses. Students should check their eligibility for particular general education courses by reviewing any "PREREQ" provisions in the descriptions of those courses. See Course Descriptions beginning on page 166.
b. Because certain major programs require specific general education courses, students should review such requirements carefully in planning a general education curriculum.
c. Courses listed under more than one general education category may count towards the fulfillment of only one general education category.
d. Course Choice Limitation: beyond the Common Core, no more than two courses with the same prefix may be used to satisfy the remaining general education requirements.

GENERAL EDUCATION REQUIREMENTS: BACHELOR'S DEGREE

| GENERAL EDUCATION FRAMEWORK AND SEMESTER HOURS NEEDED TO COMPLETE BACHELOR'S DEGREE PROGRAM REQUIREMENTS |  |
| :---: | :---: |
| COMMON CORE (9-12 SEMESTER HOURS) | REQUIREMENTS |
| WRITTEN COMMUNICATIONS I AND ORAL COMMUNICATIONS <br> 6 semester hours for most students <br> Written Communication I (3 semester hours) <br> Oral Communication (3 semester hours) <br> The first year writing course helps students make the transition to college by guiding them from writing that is based in personal experience and presented to familiar audiences toward writing that is informed by other texts and targeted to wider public audiences. The course instructs students in reading for style as well as content, to identify and assess the effectiveness of a writer's choices. <br> The first year oral communication course provides students with the basic skills and knowledge in oral communication needed for success in college and thereafter as effective citizens and lifelong learners. The course is designed as an introductory course to enhance students' critical reading, thinking, interpretation, and speaking skills. Emphasis on techniques, principles, and the practice of oral communication in a variety of formats, including public speaking. | Students must complete the following written and oral communication requirements within the first $\mathbf{3 0}$ hours of college-level (non-remedial) work at NKU. <br> Written - Successfully complete one of the following options: <br> (1) ENG 101 College Writing <br> (2) ENG 151 Honors Freshman Composition (Students successfully completing this course option will satisfy both the Written Communication I and Written Communication II requirement) <br> Oral - Successfully complete CMST 101 Principles of Speech Communications <br> Students not satisfying this requirement within the first 30 hours of collegelevel work at NKU will not be allowed to enroll in any 200-level general education courses. |
| MATHEMATICS <br> 3 semester hours for most students <br> In the mathematics course, students will engage in mathematical problemsolving. | Students must complete the mathematics requirement within the first $\mathbf{4 5}$ hours of college-level work at NKU. <br> Successfully complete one course from approved list of general education mathematics courses. <br> Students not satisfying this requirement within the first 45 hours of collegelevel work at NKU will not be allowed to enroll in any 200-level general education courses except courses in the Written Communication II category. |
| WRITTEN COMMUNICATION II <br> 3 semester hours for most students <br> The advanced writing course teaches students to become more independent as writers. This course guides students toward research strategies that are more broad and sophisticated, and stylistic choices that are more varied and creative. Disciplines may require a specific general education course within this category to satisfy major requirements. | Students must complete the second level of the written communication requirement before completing the first 60 hours of college-level work at NKU. <br> Student must successfully complete one course from the following: <br> ENG 291 Advanced Writing, EDU 291W Advanced Writing in the Education Profession, MUS 291W Advanced Writing in the Music Profession, PSC 291W Advanced Writing in Political Science, PSY 291W Writing in Psychology or CHE 291W Chemical Information and Writing. ENG 151 Honors Freshman Composition also satisfies this requirement. <br> Students not satisfying this requirement within the first 60 hours of collegelevel work at NKU will be required to meet with an academic adviser prior to enrolling in any additional general education courses. |
| LIBERAL ARTS CORE (31-34 SEMESTER HOURS) | REQUIREMENTS |
| The emphasis for the Liberal Arts Core is on experiences within the framework of many disciplines. Students will use the following foundational skills: critical thinking, problem solving, and research. | Course Choice Limitation: beyond the Common Core, no more than two courses with the same prefix may be used to satisfy the remaining general education requirements. <br> Students must complete the Common Core General Education Requirements prior to enrolling in any upper-level general education courses. |

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## BEHAVIORAL AND SOCIAL SCIENCES

## 9 semester hours for most students

3 semester hours in behavioral sciences
3 semester hours in social sciences
3 semester hours in an additional behavioral science or social science course

Behavioral and Social Science courses address understanding of human behavior, interactions, and environments within established social structures and forums.

Successfully complete three courses from approved general education course list for behavioral and social sciences. Students must satisfy the following requirements:

Successfully complete one course from approved list of general education behavioral sciences courses;
Successfully complete one course from approved list of general education social science courses; and
Successfully complete one additional course from approved list of general education social or behavioral sciences courses.

## GENERAL EDUCATION FRAMEWORK AND SEMESTER HOURS NEEDED TO COMPLETE BACHELOR'S DEGREE PROGRAM REQUIREMENTS

## FINE ARTS

3 semester hours

Fine Arts courses include oral, visual, written musical, spatial, or kinesthetic forms of expression and include components that emphasize student creativity, expression, and production. Students will be required to identify and analyze the impact of cultural and historical factors on the creation and reception of artistic works.

## HISTORY

## 3 semester hours

History is concerned with understanding change and development over space and time. Students in history courses should obtain a fundamental grasp of the major eras, driving forces, formative movements, and ideas in the shaping of nations or regions in a global historical context.

## HUMANITIES

## 6 to 8 semester hours for most students

Humanities courses are concerned with seeing how we as human beings are connected, and hence the power of literature, history, philosophy, religion, languages, and culture in transcending boundaries and overcoming divisions. Courses taken to fulfill this requirement will be selected from the following content areas: History, Literature, Fine Arts, Philosophy/Religious Studies, or Foreign Languages.

## LITERATURE

## 3 semester hours

Literature courses are concerned with understanding texts of all forms of written expression.

## NATURAL SCIENCE

## 6-8 semester hours for most students

The two courses, together, will introduce the methods of inquiry associated with science, the basic principles used to explain natural phenomena and the connection between science and real-world problems.

## DIVERSITY CORE (6 SEMESTER HOURS)

## RACE AND GENDER PERSPECTIVE

3 semester hours

Explores race, gender, and cultural issues within the framework of a disciplinary perspective. Courses will advance a student's understanding of effective citizenship by addressing issues on a personal, local, national, or global level. Race and Gender courses make race and gender the central focus of the course. The courses concentrate on interrelationships between racial/ethnic groups, on the intersection of race/ethnicity and gender, and on the overlap of race/gender and cultural, political, economic, and social institutions. They incorporate historical understandings and contemporary issues such as the legacy of slavery and the evolution of gender roles, and their impact on current human experiences. The primary focus of the courses is how these issues manifest themselves in the United States.

Successfully complete one course from approved general education course list for fine arts.

Successfully complete one course from approved general education course list for history.

Successfully complete two courses from approved general education course list for humanities with the following exception: only one course from History, Literature, or Fine Arts (ART, ARTH, MUS, TAR) may be selected to satisfy this requirement. Students taking more than two courses with the same prefix (ART, ARTH, MUS, TAR, HIS, ENG) within the general education common core category will receive credit for only two courses; the additional semester hours will count as electives, not as general education credits.

Students who choose Foreign Language courses to fulfill the Humanities category are required to take a two-course sequence.

Successfully complete one course from approved general education course list for literature.

Successfully complete two courses from approved general education course list for natural sciences; one must be a laboratory course.

## REQUIREMENTS

Course Choice Limitation: beyond the Common Core, no more than two courses with the same prefix may be used to satisfy the remaining general education requirements.

Successfully complete one course from approved general education course list for the race and gender perspective (subject to course choice limitation indicated above).

## NON-WESTERN PERSPECTIVE <br> 3 semester hours

Explores economic, social/cultural, political, linguistic, ecological, race, gender, or religious issues within the framework of a disciplinary perspective. The major criterion is the type of culture, not the geographic location. Cultures that are significantly different from European and North American cultures fulfill the definition. Courses will advance a student's understanding of effective world citizenship by addressing issues on a personal, local, national, or global level.

Course Choice Limitation: beyond the Common Core, no more than two courses with the same prefix may be used to satisfy the remaining general education requirements.

Successfully complete one course from approved general education list for the non-Western perspective (subject to course choice limitation indicated above).

## MINIMUM NUMBER OF SEMESTER HOURS REQUIRED TO COMPLETE GENERAL EDUCATION PROGRAM REQUIREMENTS FOR BACHELOR'S DEGREE TOTALS 46

## GENERAL EDUCATION PROGRAM

To satisfy the General Education Program requirements, students are limited to the following Course Choice Limitation: beyond the Common Core, no more than two courses with the same prefix may be used to satisfy the remaining general education requirements.
For example:

1. a student taking a TAR course to satisfy the fine arts general education requirement and a TAR course to satisfy the Liberal Arts Core humanities requirement may not take a TAR course to satisfy the Diversity Core requirement;
2. a student taking a TAR course to satisfy the fine arts general education requirement and a TAR course to satisfy one Liberal Arts Core humanities requirement, may not take a TAR course to satisfy the second humanities requirement.

Students will receive elective credit for the additional courses with the same prefix. The course will not count toward satisfying general education requirements.

## LIST OF APPROVED GENERAL EDUCATION COURSES BY CATEGORY

a. Behavioral Sciences

Anthropology
ANT 100 Cultural Anthropology
ANT 110 Introduction to Archaeology
ANT 201 World Cultures
ANT 230 North American Indians
ANT 231 Modern American Indians
ANT 240 Peoples of Africa
ANT 245 Peoples of Latin America
ANT 270 Native Australia and Oceania
ANT 273 Race, Gender, and Culture
ANT 294 Topics: Anthropology
ANT 310 African Arts
Psychology
PSY 100 and PSY 100H Introduction to Psychology
PSY 200 Psychology of Personal Adjustment
PSY 201 Psychology of Race and Gender
PSY 205 Psychology of Human Sexuality
PSY 206 Human Sexuality Forum
PSY 220 Lifespan Development
Sociology
SOC 100 Introductory Sociology
SOC 205 Current Social Issues
SOC 240 Peoples of Africa
SOC 245 Latin American Societies
b. Fine Arts

Art
ART 100 Art Appreciation
ARTH 101 Survey of Western Art I
ARTH 102 Survey of Western Art II
ARTH 103 Survey of Western Art III
ARTH 104 Survey of Asian Art

Music
MUS 100 Music Appreciation
MUS 107 Survey of African American Music
MUS 108 History of Rock and Roll
MUS 109 History of American Popular Music
MUS 110 Appreciation of Jazz
MUS 230 History of Music: Antiquity through Baroque
MUS 231 History of Music: Classical to the Present
Theatre
TAR 100 Theatre Appreciation
TAR 111 Creative Expression Through Acting
TAR 165 Comparative Arts
c. History

History
HIS 100 History of Europe to 1713
HIS 101 History of Europe, 1713 to the Present
HIS 102 History of the United States through 1877
HIS 103 History of the United States since 1877
HIS 106 History of African Americans to1877
HIS 107 History of African Americans since 1877
HIS 108 World History to 1500
HIS 109 World History since 1500
HIS 194 Honors Seminar
Philosophy
PHI 180 History of Classical and Medieval Philosophy
PHI 185 History of Modern and Contemporary Philosophy
Religious Studies
REL 181 Survey of the Hebrew Bible
REL 182 Survey of the New Testament
REL 185 Survey of Christianity
REL 186 Introduction to Judaism

## d. Humanities

Foreign Language
Arabic
ARI 101 Elementary Arabic I
ARI 102 Elementary Arabic II
ARI 201 Intermediate Arabic I
ARI 202 Intermediate Arabic II
Chinese
CHI 101 Elementary Chinese I
CHI 102 Elementary Chinese II
CHI 201 Intermediate Chinese I
CHI 202 Intermediate Chinese II
French
FRE 101 Elementary French I
FRE 102 Elementary French II
FRE 201 Intermediate French I
FRE 202 Intermediate French II
FRE 320 Survey of French Literature
German
GER 101 Elementary German I
GER 102 Elementary German II

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GER 201 Intermediate German I
GER 202 Intermediate German II
GER 320 Survey of German Literature
Italian
ITA 101 Elementary Italian I
ITA 102 Elementary Italian II
ITA 201 Intermediate Italian I
ITA 202 Intermediate Italian II
Japanese
JPN 101 Elementary Japanese I
JPN 102 Elementary Japanese II
JPN 201 Intermediate Japanese I
JPN 202 Intermediate Japanese II
Latin
LAT 101 Elementary Latin I
LAT 102 Elementary Latin II
LAT 201 Intermediate Latin I
LAT 202 Intermediate Latin II
Russian
RUS 101 Elementary Russian I
RUS 102 Elementary Russian II
RUS 201 Intermediate Russian I
RUS 202 Intermediate Russian II
Spanish
SPI 101 Elementary Spanish I
SPI 102 Elementary Spanish II
SPI 201 Intermediate Spanish I
SPI 202 Intermediate Spanish II
SPI 320 Surveys of Peninsular Spanish Literature
SPI 321 Survey of Spanish American Literature
History
HIS 100 History of Europe to 1713
HIS 101 History of Europe, 1713 to the Present
HIS 102 History of the United States through 1877
HIS 103 History of the United States since 1877
HIS 106 History of African Americans to1877
HIS 107 History of African Americans since 1877
HIS 108 World History to 1500
HIS 109 World History since 1500
HIS 194 Honors Seminar
Literature
ENG 200 Introduction to Literature
ENG 201 Ideas in Literature
ENG 202 Survey of British Literature I
ENG 203 Survey of British Literature II
ENG 206 Western World Literature I
ENG 207 Western World Literature II
ENG 208 Survey of American Literature I
ENG 209 Survey of American Literature II
ENG 211 Survey of Women's Literature I
ENG 212 Survey of Women's Literature II
ENG 217 African American Literature to 1940
ENG 218 African American Literature from 1940-present
ENG 265 Literature and the Human Experience
ENG 266 Folklore and Literature
ENG 300 American Women Poets
ENG 301 American Novel
ENG 302 Literature and Film
ENG 303 British Novel
ENG 305 American Women Writers
ENG 306 Multicultural American Literature
ENG 308 Shakespeare I
ENG 309 Shakespeare II
ENG 311 Tragedy
ENG 312 Comedy
ENG 314 Modern European Literature in Translation

ENG 315 The Bible as Literature
ENG 318 The Short Story
ENG 320 Satire
ENG 322 Literature and Sexuality
Music
MUS 100 Music Appreciation
MUS 107 Survey of African American Music
MUS 108 History of Rock and Roll
MUS 109 History of American Popular Music
MUS 110 Appreciation of Jazz
MUS 230 History of Music: Antiquity through Baroque
MUS 231 History of Music: Classical to the Present
Philosophy
PHI 150 Introduction to Philosophy
PHI 155 Introduction to Ethics
PHI 160 World Religions
PHI 165 Introduction to Logic
PHI 170 Philosophy and Sexuality
PHI 180 History of Classical and Medieval Philosophy
PHI 185 History of Modern and Contemporary Philosophy
PHI 201 Ideas in Philosophy
PHI 210 Ethics in Information Technology
PHI 220 Health Care Ethics
PHI 240 Philosophy and the Arts
PHI 250 Eastern Philosophy
PHI 330 Philosophy and Law
PHI 350 Philosophy of Religion
Political Science
PSC 110 History of Western Political Thought
PSC 111 History of American Political Thought
Religious Studies
REL 181 Survey of the Hebrew Bible
REL 182 Survey of the New Testament
REL 185 Survey of Christianity
REL 186 Introduction to Judaism
REL 201 Ideas in Religious Studies
REL 370 Religion and Science
Theatre
TAR 100 Theatre Appreciation
TAR 111 Creative Expression Through Acting
TAR 165 Comparative Arts

## e. Literature

Literature
ENG 200 Introduction to Literature
ENG 201 Ideas in Literature
ENG 202 Survey of British Literature I
ENG 203 Survey of British Literature II
ENG 206 Western World Literature I
ENG 207 Western World Literature II
ENG 208 Survey of American Literature I
ENG 209 Survey of American Literature II
ENG 211 Survey of Women’s Literature I
ENG 212 Survey of Women's Literature II
ENG 211 Survey of Women's Literature I
ENG 212 Survey of Women's Literature II
ENG 217 African American Literature to 1940
ENG 218 African American Literature 1940 to present
ENG 265 Literature and the Human Experience
ENG 266 Folklore and Literature
ENG 300 American Women Poets
ENG 301 American Novel
ENG 302 Literature and Film
ENG 303 British Novel
ENG 305 American Women Writers
ENG 308 Shakespeare I

ENG 309 Shakespeare II
ENG 311 Tragedy
ENG 312 Comedy
ENG 314 Modern European Literature in Translation
ENG 315 The Bible as Literature
ENG 318 The Short Story
ENG 320 Satire
French
FRE 320 Survey of French Literature
German
GER 320 Survey of German Literature
Spanish
SPI 320 Surveys of Peninsular Spanish Literature
SPI 321 Survey of Spanish American Literature

## f. Mathematics

MAT 110 Introductory Probability
MAT 112 Calculus for Business Applications
MAT 114 Finite Mathematics
MAT 115 Mathematics for Liberal Arts
MAT 118 Technical Mathematics
MAT 120 Calculus I
MAT 121 Calculus I A
MAT 122 Calculus I B
MAT 185 Introductory Discrete Mathematics
STA 110 Introductory Probability
STA 113 Introduction to Probability and Statistics
STA 205 Introduction to Statistical Methods
STA 212 Statistics for Business Applications

## g. Natural Sciences

Laboratory courses may be paired with a lecture, the two to be taken concurrently (e.g., BIO 150 and 150L), or the laboratory is included in the course (e.g., BIO 120 or PHY 211).
Astronomy
AST 110 Solar System Astronomy with Laboratory
AST 115 Stars, Galaxies and Cosmology with Laboratory
Biology
BIO 120 General Biology with Laboratory
BIO 121 Human Systems
BIO 121L Human Systems with Laboratory
BIO 123 Human Ecology
BIO 125 Biological Perspective of Wellness
BIO 126 Human Nutrition
BIO 150, 150L Introduction to Biology I
BIO 151, 151L, 151R Introduction to Biology II
BIO 160 Plants and Human Culture
BIO 208, 208L Human Anatomy and Physiology I
BIO 209, 209L Human Anatomy and Physiology II
Chemistry
CHE 105, Discovering Chemistry with Laboratory
CHE 112, 112L Chemistry and Society
CHE 115, 115L Physiological Chemistry
CHE 120, 120L General Chemistry I
CHE 121, 121L General Chemistry II
Environmental Science
ENV 110 Introduction to Environmental Science
Geology
GLY 110 The Face of the Earth w/Laboratory
GLY 120 This Dangerous Earth
GLY 130 Dinosaurs
GLY 150 Introduction to Field paleontology
GLY 155L Regional Geology Laboratory
GLY 220 History of the Earth
GLY 230 Geology of National Parks
GLY 240 Geology of Natural Resources

Integrated Sciences
SCI 110 Integrative Natural Science I
SCI 111 Integrative Natural Science II
Physics
PHY 101 Einstein 101
PHY 110 Introduction to Physics w/Lab
PHY 211 General Physics with Laboratory I
PHY 213 General Physics with Laboratory II
PHY 115 Physics of Music and Sound
PHY 160 Introduction to Meteorology with Laboratory
PHY 220 University Physics with Laboratory I
PHY 222 University Physics with Laboratory II

## h. Non-Western Perspective

Afro-American Studies
AFR 100 Introduction to Afro-American Studies (will not additionally satisfy Race/Gender Perspective)
Anthropology
ANT 100 Cultural Anthropology
ANT 201 World Cultures
ANT 230 North American Indians
ANT 231 Modern American Indians
ANT 240 Peoples of Africa
ANT 245 Peoples of Latin America
ANT 270 Native Australia and Oceania
ANT 310 African Arts
Arabic
ARI 101 Elementary Arabic I
ARI 102 Elementary Arabic II
ARI 201 Intermediate Arabic I
ARI 202 Intermediate Arabic II
Art
ARTH 104 Survey of Asian Art
Biology
BIO 235 Costa Rican Natural History
Foreign Language
Chinese
CHI 101 Elementary Chinese I
CHI 102 Elementary Chinese II
CHI 201 Intermediate Chinese I
CHI 202 Intermediate Chinese II
Japanese
JPN 101 Elementary Japanese I
JPN 102 Elementary Japanese II
JPN 201 Intermediate Japanese I
JPN 202 Intermediate Japanese II
Geography
GEO 101 World Regional Geography
GEO 103 Geography of the Third World
Literature
ENG 216 Studies in Non-Western Literature
Music
MUS 106 Music of World Cultures
Philosophy
PHI 160 World Religions
PHI 250 Eastern Philosophy
Political Science
PSC 102 Comparative Politics
PSC 103 International Politics
Popular Culture Studies
POP 345 Japanese Popular Culture
Russian
RUS 201 Intermediate Russian I
RUS 202 Intermediate Russian II
Sociology
SOC 240 Peoples of Africa

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SOC 245 Latin American Societies
i. Oral Communications

CMST 101 Principles of Speech Communications

## j. Race/Gender Perspective

Afro-American Studies
AFR 100 Introduction to Afro-American Studies (will not additionally satisfy Non-Western Perspective)
Anthropology
ANT 273 Race, Gender, and Culture
Criminal Justice
JUS 231 Race, Gender, and the Law
Education
EDU 316 Racism and Sexism in Educational Institutions
Electronic Media Broadcasting
EMB 105 Race, Gender, and the Mass Media
Geography
GEO 107 Diversity Mapped
History
HIS 431 Historical Themes in African-American History
HIS 444 History of Women in the United States to 1900
HIS 445 History of Women in the United States since 1900
Literature
ENG 217 African American Literature to 1940
ENG 218 African American Literature from 1940-present
ENG 306 Multicultural American Literature
ENG 322 Literature and Sexuality
Music
MUS 107 Survey of African-American Music
Philosophy
PHI 322 Philosophy of Race
PHI 324 Africana Philosophy
Political Science
PSC 215 Race, Gender, and Politics
Psychology
PSY 201 Psychology of Race and Gender
Religious Studies
REL 325 African-American Religious Experiences in America
Social Work
SWK 106
Sociology
SOC 110 Introduction to Race and Gender
SOC 210 Analysis of Racism, Sexism in the U.S.

Theatre
TAR 102 Survey of Race and Gender in Dramatic Literature
Women's and Gender Studies
WGS 150 Introduction to Women’s Studies
WGS 310 Women, Wages, and Work

## k. Social Sciences

Afro-American Studies
AFR 100 Introduction to Afro-American Studies
Economics
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
ECO 215 Contemporary Economic Issues
Electronic Media Broadcasting
EMB 100 Media Literacy
EMB 105 Race, Gender, and the Mass Media
Geography
GEO 100 Elements of Geography
GEO 101 World Regional Geography
GEO 103 Geography of the Third World
GEO 107 Diversity Mapped
Journalism
JOU 100 Media Literacy
Justice Studies
JUS 101 Introduction to Criminal Justice
Political Science
PSC 100 American Politics
PSC 100H Honors American Politics
PSC 101 State and Local Politics
PSC 102 Comparative Politics
PSC 103 International Politics
PSC 110 History of Western Political Thought
PSC 111 History of American Political Though
PSC 215 Race, Gender, and Politics
Popular Culture Studies
POP 205 Introduction to Popular Culture
Social Work
SWK 203 Social Welfare in Contemporary Society

## 1. Written Communications

ENG 101 College Writing
ENG 151 Honors Freshmen Composition
ENG 291 Advanced Writing
EDU 291W Advanced Writing in the Education Profession
CHE 391W Chemical Information and Writing
HIS 291 W Advanced Historical Writing
MUS 291W Advanced Writing in the Music Profession
PSC 291W Advanced Writing in Political Science
PSY 291W Writing in Psychology

## GENERAL EDUCATION REQUIREMENTS: ASSOCIATE DEGREE

| GENERAL EDUCATION FRAMEWORK AND SEMESTER HOURS NEEDED TO COMPLETE ASSOCIATE'S DEGREE PROGRAM REQUIREMENTS |  |
| :---: | :---: |
| COMMON CORE (9 SEMESTER HOURS) | REQUIREMENTS |
| WRITTEN COMMUNICATIONS I AND ORAL COMMUNICATIONS <br> 6 semester hours for most students <br> Written Communication I (3 semester hours) <br> Oral Communication (3 semester hours) <br> The first year writing course helps students make the transition to college by guiding them from writing that is based in personal experience and presented to familiar audiences, toward writing that is informed by other texts and targeted to wider public audiences. The course instructs students in reading for style as well as content, to identify and assess the effectiveness of a writer's choices. <br> The first year oral communication course provides students the basic skills and knowledge in oral communication needed for success in college and thereafter as effective citizens and lifelong learners. Designed as an introductory course to enhance student's critical reading, thinking, interpretation, and speaking skills. Emphasis on techniques, principles, and the practice of oral communication in a variety of formats, including public speaking. | Students must complete the following written and oral communication requirements within the first $\mathbf{3 0}$ hours of college-level work at NKU. <br> Written - successfully complete the following: <br> (1) ENG 101 College Writing <br> Oral - Successfully complete CMST 101 Principles of Speech Communications |
| MATHEMATICS <br> 3 semester hours for most students <br> In the mathematics course, students will engage in mathematical problem solving. | Students must complete the mathematics requirement within the first $\mathbf{4 5}$ hours of college-level work at NKU. <br> Successfully complete one course from approved general education course list for mathematics. |
| LIBERAL ARTS CORE (9-10 SEMESTER HOURS) | REQUIREMENTS |

The emphasis for the Liberal Arts Core is on experiences within the framework of many disciplines. Students will use the following foundational skills: critical thinking, problem solving, and research. Course Choice Limitation: beyond the Common Core, no more than two courses with the same prefix may be used to satisfy the remaining general education requirements.

BEHAVIORAL AND SOCIAL SCIENCES
3 semester hours for most students
Behavioral and Social Science courses address understanding of human behavior, interactions, and environments within established social structures and forums.

## HUMANITIES

## 3 semester hours for most students

Humanities courses are concerned with seeing how we as human beings are connected, one to the other, and hence the power of literature, arts, history, philosophy, religion, languages, and culture in transcending boundaries and overcoming divisions. Courses taken to fulfill this requirement will be selected from the following content areas: History, Literature, Fine Arts, Philosophy/Religious Studies or Foreign Languages.

NATURAL SCIENCE
3-4 semester hours for most students
Will introduce the methods of inquiry associated with science, the basic principles used to explain natural phenomena and the connection between science and real-world problems.

Successfully complete one course from approved general education course list for behavioral and social sciences.

Successfully complete one course from approved general education course list for humanities.

Successfully complete one course from approved general education course list for natural sciences with or without laboratory component. See specific degree requirements for additional information on requirements.

## KENTUCKY GENERAL EDUCATION TRANSFER POLICY

For students who reside in Kentucky, there is a statewide General Education Transfer Policy. The policy defines how public colleges and universities accept each other's general education requirements for transfer students. Courses that meet General Education Transfer Policy requirements are identified by each institution as Category, Core, or Fully Certified.

The Kentucky Transfer Policy defines two transfer components: a General Education Component and a Specialty Component.

## General Education Component (48 semester hour block)

The 48 semester hour General Education Component provides a broad background of general education courses. The component is comprised of a 33 semester hour core component and a 15 semester hour block of unspecified general education courses. See following for breakdown on components.

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## General Education Core Transfer Component (33 semester hours)

The core component include the following five categories:

## 1. Communication ( 9 semester hours)

Written Communication - NKU Written Composition I see "WRITTEN COMMUNICATIONS I AND ORAL COMMUNICATIONS" on page 19.
Oral Communication - NKU Oral Communication see "WRITTEN COMMUNICATIONS I AND ORAL COMMUNICATIONS" on page 19.

## 2. Humanities (6 semester hours)

The disciplines represented in this category must be different from those in Behavioral/Social Sciences. Courses may be chosen from the following: Fine Arts, Literature, Foreign Language, History, or Philosophy/Religion courses in the List of Approved General Education Courses (see "HUMANITIES" on page 20.
3. Behavioral/Social Sciences ( 9 semester hours).

At least two disciplines must be represented and must be different from those in Humanities. Courses may be chosen from the List of Approved General Education Courses for Behavioral/Social Sciences (see "BEHAVIORAL AND SOCIAL SCIENCES" on page 20.

## 4. Natural Sciences (6 semester hours)

Courses may be chosen from the List of Approved General Education Courses for Natural Sciences (see "NATURAL SCIENCE" on page 20.
5. Mathematics (3 semester hours)

Courses may be chosen from the List of Approved General Education Courses for Mathematics (see "MATHEMATICS" on page 19.

## General Education Transfer Block ( 15 semester hours)

Kentucky transfer students may transfer an unspecified 15 semester hour block of general education courses to satisfy this component.

## Specialty Component ( $\mathbf{1 2}$ semester hour block)

The Specialty Component is comprised of 12 semester hours of discipline specific credits. The Specialty Components have not been completed to date. Check with the NKU Transfer Office for more information.

## General Education Transfer Certifications Fully General Education Certified

A student transferring from a Kentucky public institution will be accepted at NKU as "Fully General Education Certified" when the/she has completed a general education program at another institution or combination of institutions that includes a 48 semester hour block of general education courses (the 33 -semester hour General Education Core Transfer Component and the 15 -semester hour General Education Transfer Block). The transcript from sending institution must indicate that the student is "Fully General Education Certified" to guarantee all credits will be accepted at NKU. Additionally, students completing an approved Associate of Arts or Associate of Science Transfer degree (must include a minimum of 48 semester hours of general education courses) must have a cumulative grade point average of 2.0 or higher to qualify for Kentucky Transfer Policy.

## Core Component Certified

A student transferring from a Kentucky institution will be accepted at NKU as "Core Component Certified" when they complete the 33 semester hour Core Transfer Component. The student must also hold a cumulative grade point average of 2.0 or higher and will need to fulfill the remaining NKU general education requirements. Student's transcript must indicate that the student is "core certified."

Students completing the "core certified" component must complete 15 hours of additional general education courses. It is recommended that students complete the history, literature, fine arts, and diversity categories to satisfy general education requirements.

## Category Certified

A student transferring from a Kentucky institution will be accepted at NKU as "Category Certified" when they he/she has completed one or more of the five categories in the Core Transfer Component. The student must hold a cumulative grade point average of 2.0 or higher and will need to fulfill the remaining general education requirements.The student's transcript must indicate each category that the student has completed and be marked as "category satisfied."

For more information regarding NKU transfer policies, see http:// www.nku.edu/~admitnku/transfer_services/

## Bachelor's Program Specialty Transfer Component Policy

The Bachelor's Program Transfer Specialty Component policy allows for the ease of transfer of course work within a student's major and discipline. Students who are "General Education Certified" under the Kentucky General Education Transfer policy (completed all categories, and have at least 48 semester hours in general education) are eligible for evaluation of credit within bachelor's program specialty transfer frameworks (not completed to date). The Transfer Frameworks will identify at least 12 semester hours in a specific discipline that will transfer as a block to satisfy major requirements. Students who are planning to transfer to another public Kentucky college or university should work closely with their advisor, as well as with the institution to which they plan to transfer, in order to ensure the completion of all necessary requirements.

## UNDERGRADUATES TAKING GRADUATE COURSES AT NKU

In general, no undergraduate student may enroll in a 600 level or above graduate course. The Office of Graduate Programs will notify the student who has done so at the beginning of the semester so the student can drop the course. Any student who does not drop the course will be administratively dropped from the course by the Office of Graduate Programs.

EXCEPTION: If you are an undergraduate student who has no more than six credits remaining to complete a bachelor's degree, you may be dually enrolled as a graduate student, provided you have the approval of your undergraduate academic advisor and the relevant graduate program director. Students wishing to do so, must submit a graduate application and meet all admission requirements to the program with the exception of the earned degree. As a dually enrolled student, you may take a maximum of twelve credits, graduate and undergraduate combined, in a single semester. Graduate credit for these courses will not be granted unless all work for the undergraduate degree is completed in the semester in which student is enrolled for graduate credit. Credits earned in a graduate course cannot apply toward both a bachelor's and a graduate degree.

## GRADUATION REQUIREMENTS CHECKLIST

## 1. Graduation

a. When a student anticipates successful completion of degree requirements, he/she must file an Application for Degree Candidacy in the Office of the Registrar Service Center. The approved Program Certification Form for each undergraduate applicant must be on file in the Office of the Registrar prior to, or submitted with the filing of the Application for Degree Candidacy. The dates by which the Application for Degree Candidacy must be in the Office of the Registrar Service Center are

$$
\begin{array}{ll}
\text { for fall graduation } & 8 \text { April } \\
\text { for spring graduation } & 8 \text { October } \\
\text { for summer graduation } & 8 \text { April }
\end{array}
$$

b. The student pursuing a bachelor's degree who has successfully completed 54 semester hours will file a Program Certification Form for the major and the same form for either an area of con-
centration or a minor. A student in an associate degree program must file a Program Certification Form after completion of 30 semester hours. The certification form must be completed no later than during the semester preceding the one in which the student plans to graduate. The student will secure the form from the Office of the Registrar website and will follow instructions given at that time. In some cases, students may be referred to their academic programs to obtain necessary forms.
c. The student will earn at least $\mathbf{1 2 8}$ semester hours for a bachelor's degree and at least 64 semester hours for an associate degree. Also, all grades of $I$ and $K$ must be cleared before graduation requirements are complete.
d. The student must fulfill residency requirements: the last 30 semester hours of a bachelor's degree and the last 20 semester hours of an associate degree must be taken at NKU. Also, a minimum of $25 \%$ of the semester hours required for a bachelor's degree must be taken at NKU.
e. Bachelor's degree seeking students must complete 45 semester hours of course work at the 300 -level or above.
f. Students must earn at least a 2.00 grade point average (GPA) on all work attempted at NKU, at least 2.00 on all college work attempted (excluding developmental course work) and at least 2.00 in the major-unless otherwise specified in the program requirements.
g. In addition to the requirements for the major, bachelor degree seeking students must complete the requirements for a minor or area of concentration (unless the minor/area of concentration is contained within the major requirements). See minor/area of concentration section below. Students completing an associate's degree do not need to complete a minor or area of concentration.
$h$. The student will complete general education requirements appropriate for the degree being sought (see "Catalog Applicability" elsewhere in this catalog).
i. All grades of I and K must be cleared before graduation requirements are satisfied.
j. The student must be recommended by the faculty.
k. The student will satisfy all financial and administrative obligations to the University.

1. As part of Northern Kentucky University's on-going efforts to improve its program offerings, a student will be required to participate in assessment activities (see Senior Assessment section on the following page). In addition to the senior assessment requirements, a student may be required to complete assessment requirements for a major/minor.

## 2. Graduation with Honors

a. Bachelor's Degree

| Cum Laude | $3.50-3.7499$ |
| :--- | :--- |
| Magna Cum Laude | $3.75-3.8999$ |
| Summa Cum Laude | $3.90-4.00$ |

In order for a student to graduate with bachelor's degree honors, he/she must earn a minimum of 64 semester hours in residence (courses at NKU).
b. Associate Degree

With Distinction 3.50-3.799
With High Distinction 3.80-4.00
In order for a student to graduate with associate degree honors, he/she must earn a minimum of 32 semester hours in residence (courses at NKU).
c. To graduate with honors, a student must have an overall GPA and a NKU GPA of at least 3.50. The Honors designation awarded will be based on the NKU GPA.
d. Honors recognition appears in the Commencement Program based upon the grade point averages (excluding developmental course work) at the conclusion of the previous semester. Honors will appear on the transcript based upon the grade point aver-
ages (excluding developmental coursework) at the time of graduation.

## 3. Minor or Area of Concentration

1. A student who wishes to have a minor or area of concentration certified must meet requirements described in the student's catalog of applicability.
2. Students earning associate degrees cannot earn a minor; only students at the bachelor's level may earn a minor.
3. The minimum number of semester hours required for minors/ areas of concentration varies among departments and can be found in individual department descriptions.
4. A GPA of at least 2.00 is required or a minor and area of concentration unless otherwise specified in the program requirements.

## 4. Senior Assessment

a. As a requirement for graduation with a bachelor's degree, all students who have completed at least 90 semester hours will be required to participate in senior assessment. It is anticipated that most students should satisfy this requirement prior to completing 110 semester hours.
b. After completing at least 90 semester hours, students are to meet the senior assessment requirement in the following semester. If a student does not participate in the assessment that semester, then the student is in "assessment default."
c. A student in default will not be able to receive her or his diploma until the default is remedied. A student can remedy assessment default by participating in the appropriate assessment.
d. No student will be expected or required to participate in more than one form of general education assessment. However, students may be required to participate in a separate assessment of their major field.
e. See link for senior survey at https://webapps.nku.edu/secureapps/ seniorsurvey.

## 5. Second Bachelor's Degree

1. A student wishing to receive two bachelor's degrees may meet requirements for them simultaneously or successively.
2. Requirements for the second major will be those listed under the student's degree catalog.
3. A student wishing to receive two degrees on the same date must a. complete requirements for both degrees.
b. earn a minimum of 30 semester hours in residence (courses at NKU) beyond requirements for the first degree.
c. earn a minimum of 60 semester hours in residence at NKU.
4. A student wishing to earn a second bachelor's degree after receiving the first must:
a. complete requirements for the second degree;
b. earn at least 12 semester hours in residence (courses at NKU) in additional to those he/she may already have in the major field offering the second degree;
c. earn a minimum of 30 semester hours in residence (courses at NKU) beyond requirements for the first degree;
d. earn a minimum of 64 semester hours in residence at NKU beyond the requirement for the first degree to be considered for graduation with honors.

## 6. Second Associate Degree

1. A student who has not earned a bachelor's degree and wishes to receive two associate degrees may meet requirements for them simultaneously or successively.
2. A student wishing to receive two associate degrees must
a. complete requirements for both degrees;
b. earn a minimum of 20 semester hours in residence (courses at NKU) beyond those required for the first degree;
c. earn a minimum of 40 semester hours in residence (courses at NKU) at NKU.
3. A student who has already earned a bachelor's degree and wishes to receive an associate degree must
a. complete requirements for the degree;
b. earn a minimum of 20 semester hours in residence (courses at NKU) at NKU beyond requirements for the first degree;
c. earn at least 12 semester hours in residence (courses at NKU) in addition to courses the student completed in the major;
d. earn a minimum of 32 semester hours in residence (courses at NKU) to be considered for graduation with honors.

## 7. Second Major

1. A student who wishes to be certified in two or more major programs must meet requirements for each simultaneously.
2. The degree conferred will be based upon the student's first major; both majors will be indicated on the student's academic transcript.

## "NON-TRADITIONAL" CREDIT

## Credit by Examination

## 1. Advanced Standing Examination

Upon recommendation by the appropriate chairperson and with the approval of the appropriate dean, a currently enrolled student may receive advanced standing credit by passing an examination in a subject in which she/he has demonstrated exceptional ability. A student may obtain an application for the advanced standing examination from the Office of the Registrar, AC 301. He/she must follow the procedures printed on the application. There is an examination fee for each course in which a student takes an advanced standing examination. These examinations may be taken for a letter grade or pass/fail as determined by the department chairperson prior to testing. If a failing grade is earned, the course will not be posted to the student's transcript. The student's NKU transcript will indicate the class as an advanced standing examination.

## 2. College Level Examination Program (CLEP)

CLEP, a national program of credit by examination administered by the College Entrance Examination Board, was established at NKU to provide individuals with an opportunity to earn credit by examination. CLEP tests may be taken at NKU approximately the 3rd week of the month (except December and July) in the testing office. NKU students may earn up to 45 semester hours through (a) General and/or (b) Subject examinations. The University is a recognized CLEP Testing Center, and testing applicable to other institutions is also conducted. A grade of pass $(P)$ will be assigned for CLEP courses successfully completed.
a. General Examinations

Five tests are within the General Examination portion of CLEP: English composition, humanities, natural science, social science/ history, and mathematics. After submission of an official score report, NKU will award credit in three areas: humanities, natural science, and social science/history; up to 18 semester hours may be earned from the exams in each area. Six semester hours will be awarded for a minimum score of 50 . Credit earned through these examinations is elective credit and does not satisfy general education requirements.
b. Subject Examinations

The following subject examinations equated below with specific courses offered at NKU are accepted by the University. NKU requires submission of an official score report. (The University reserves the right to revise these listings in accord with recommendations from the Educational Testing Service. Check the

Testing Website at http://www.nku.edu/~testing/clep.htm for updates.)

| EXAMINATION | MINIMUM SCORE | SEMESTER HOURS | EQUIVALENT <br> NKU COURSES |
| :---: | :---: | :---: | :---: |
| American History I | 50 | 3 | HIS 102 |
| American History II | 50 | 3 | HIS 103 |
| American Literature | 50 | 6 | ENG 208-209 |
| Analyzing and Interpreting Literature | 51 | 3 | ENG 200 |
| English Composition with Essay | 50 | 3 | ENG 101 |
| Calculus with <br> Elementary Functions | 50 | 6 | MAT 121 <br> MAT 122 |
| English Literature | 50 | 6 | ENG 202-203 |
| General Biology (No lab credit awarded) | 50 | 6 | BIO 120-121 |
| Here's to Your Health | 50 | 3 | BIO 125 |
| General Chemistry (No lab credit awarded) | 50 | 6 | CHE 120-121 |
| Introductory Business Law | 51 | 3 | BUS 230 |
| Introductory Psychology | 50 | 3 | PSY 100 |
| Financial Accounting | 50 | 3 | ACC 200 |
| Principles of Management | 50 | 3 | MGT 205 |
| Principles of Macroeconomics | 50 | 3 | ECO 200 |
| Principles of Microeconomics | 50 | 3 | ECO 201 |
| Principles of Marketing | 50 | 3 | MKT 305 |
| Western Civilization I | 50 | 3 | HIS 100 |
| Western Civilization II | 50 | 3 | HIS 101 |

CLEP credit is available in French, German, and Spanish. Students must meet with the foreign language coordinator to receive credit requirements.

Policies on CLEP vary depending upon the academic area; students are advised to consult their adviser prior to taking CLEP examinations. The Health, Counseling, and Testing Services administers CLEP and provides data about the program. With approval of the appropriate dean, a student at NKU may take the CLEP subject examination instead of repeating a course in which he/she received a $D$ or $F$, an option that may be exercised up to four times.

## 3. Advanced Placement (AP)

High school students may receive credit by earning the required score on an approved AP examination. An appropriate number of semester hours will be awarded, and a grade of pass ( $P$ ) will be assigned for successful completion of approved courses. Information concerning the AP program may be obtained from high school counselors. Official AP scores should be sent to the University's Office of the Registrar. Additional information on regulations and approved NKU programs for AP credit may be obtained from the Office of the Registrar. Examination scores range from 1-5. Subject areas in which a student may receive credit from Northern Kentucky University by earning acceptable scores are listed below.

Credit for those areas marked by an asterisk must be coordinated with the chair of the department concerned.

\begin{tabular}{|c|c|c|c|}
\hline DISCIPLINE \& ACCEPTABLE
SCORE \& COURSE \& SEMESTER HOURS \\
\hline Art, General \& \begin{tabular}{l}
\[
3
\] \\
4 or more
\end{tabular} \& \begin{tabular}{l}
ART 100 Art Appreciation \\
ART 123 Foundations
\end{tabular} \& \[
3
\]
\[
3
\] \\
\hline Art, Drawing \& 4 or more \& \begin{tabular}{l}
ARTD 210 \\
Drawing I
\end{tabular} \& 3 \\
\hline History of Art \& 4, 5 \& \begin{tabular}{l}
ARTH 101 \\
Survey \\
ARTH 102 \\
Survey II
\end{tabular} \& \begin{tabular}{l}
3 \\
3
\end{tabular} \\
\hline Biological Sciences \& 3 \& BIO 120 General Biology \& 4 \\
\hline Biological Sciences \& 4 or more \& \begin{tabular}{l}
BIO 150, 150L \\
Intro. to Biology I
\end{tabular} \& 4 \\
\hline Calculus AB* \& 3 \& MAT 128 \& 3 \\
\hline Calculus AB* \& 4 or 5 \& MAT 129 \& 4 \\
\hline Calculus BC* \& 3 \& MAT 129 \& 4 \\
\hline Calculus BC* \& 4 or 5 \& MAT 129 and MAT 229 \& \[
\begin{aligned}
\& 4 \\
\& 5
\end{aligned}
\] \\
\hline Chemistry \& 3 \& CHE 120, 120L General Chemistry \& 4 \\
\hline Chemistry \& 4, 5 \& \begin{tabular}{l}
CHE 120, 120L \\
General Chemistry I, CHE 121, 121L \\
General Chemistry II
\end{tabular} \& \[
4
\]
\[
4
\] \\
\hline Computer Science A or AB \& \[
\begin{gathered}
3,4,5 \\
3
\end{gathered}
\] \& \begin{tabular}{l}
INF 260 \\
INF 260L \\
Object Oriented \\
Programming I \& \\
Lab I
\end{tabular} \& \[
\begin{aligned}
\& 3 \\
\& 1
\end{aligned}
\] \\
\hline Computer Science AB \& 4, 5 \& CSC 360 Object Oriented Programming II \& 3 \\
\hline English Language/ Composition \& 3 or more \& \begin{tabular}{l}
ENG 101 \\
College Writing \\
ENG 291 \\
Advanced College \\
Writing
\end{tabular} \& \begin{tabular}{l}
\[
3
\] \\
3
\end{tabular} \\
\hline \begin{tabular}{l}
English* \\
Literature/ \\
Composition
\end{tabular} \& 3 or more \& \begin{tabular}{l}
ENG 101 \\
College Writing \\
(It is recommended that students receiving credit for ENG 101 take ENG 151; ENG 291 may be substituted) ENG 200 Intro. to Literature
\end{tabular} \& 3

3 <br>

\hline European History \& 3 or more \& | HIS 100 |
| :--- |
| History of Europe to 1713 |
| HIS 101 |
| History of Europe, |
| 1713 to the Present | \& 3

3 <br>
\hline
\end{tabular}

| DISCIPLINE | $\begin{aligned} & \text { ACCEPTABLE } \\ & \text { SCORE } \end{aligned}$ | COURSE | SEMESTER HOURS |
| :---: | :---: | :---: | :---: |
| French | 3 or more | FRE 101 <br> Elementary French I | 4 |
| German | 3 or more | GER 101 <br> Elementary German I | 4 |
| Government and Politics - U.S. | 3 or more | PSC 100 <br> American Politics PSC 101 <br> State and Local Politics | $3$ <br> 3 |
| Government and Politics-Comp | 3 or more | PSC 102 <br> Comparative Politics | 3 |
| European History | 3 or more | HIS 100 <br> History of Europe to 1713 <br> HIS 101 <br> History of Europe, <br> 1713 to the Present | $3$ $3$ |
| Latin: Virgil | 3 or more | LAT 101 <br> Elementary Latin I | 3 |
| Macroeconomics | 3 or more | ECO 200 <br> Principles of Macroeconomics | 3 |
| Microeconomics | 3 or more | ECO 201 <br> Principles of Microeconomics | 3 |
| Music | 3 or more | MUS 122 <br> Theory I <br> MUS 124 <br> Aural Skills I | $3$ |
| Physics B | 3 or more | PHY 110 <br> Intro. to Physics with lab | 4 |
| Physics C- <br> Mechanical <br> Physics C- Electricity/Magnetism | 3 or 4 <br> 5 <br> 3 or 4 <br> 5 | PHY 211 <br> Univ. Physics w/Lab I or PHY 220 University Physics w/Lab I PHY 213 General Physics w/ Lab II or PHY 222 Univ. Physics w/Lab II | 5 <br> 5 <br> 5 <br> 5 |
| Psychology | 3 | PSY 100 <br> Introduction to Psychology | 3 |
| Spanish | 3 or more | SPI 101 <br> Elementary Spanish I | 4 |
| Statistics | 3 or more | STA 212 or 205 or 113 Statistics for Business Application I | 3 |

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| DISCIPLINE | ACCEPTABLE <br> SCORE | COURSE | SEMESTER <br> HOURS |
| :--- | :---: | :--- | :---: |
| U.S. History | 3 or more | HIS 102 <br> History of U.S. <br> through 1877 <br> HIS 103 <br> History of U.S. since <br> 1877 | 3 |
| World History | 3 or more | HIS 108 World His- <br> tory to 1500 <br> HIS 109 World His- <br> tory since 1500 | 3 |

Transfer students who were awarded AP credit by their previous institutions are required to resubmit their original AP score report for evaluation by NKU standards.

## 4. International Baccalaureate (IB)

High school students completing this rigorous program may receive credit by earning the required score in a specific subject. An appropriate number of semester hours will be awarded, and a grade of pass $(P)$ will be assigned for successful completion of approved courses. To earn credit, the student must request an official transcript issued by the New York office of the International Baccalaureate be sent to the University's Office of the Registrar. Additional information on regulations and approved NKU programs for IB credit may be obtained from the Office of the Registrar. Subject areas in which a student may receive credit from Northern Kentucky University by earning acceptable scores are listed below:

| DISCIPLINE | ACCEPTABLE SCORE | COURSE | SEMESTER HOURS |
| :---: | :---: | :---: | :---: |
| Biology (Subsidiary level) (Higher level) | $\begin{gathered} 4 \\ 5 \text { or higher } \end{gathered}$ | $\begin{aligned} & \hline \text { BIO 120 } \\ & \text { BIO 150-150L } \end{aligned}$ | $\begin{aligned} & 4 \\ & 5 \end{aligned}$ |
| Economics (higher level) | 4 or higher | $\begin{aligned} & \hline \text { ECO } 200 \\ & \text { ECO } 201 \end{aligned}$ | $3$ |
| English <br> (Higher level) | 4 or higher | ENG 101 ENG 291 | $3$ |
| French (Subsidiary level) (Higher level) | 4 or higher 4 or higher | FRE 101 <br> FRE 101, 102 | $\begin{aligned} & 4 \\ & 8 \end{aligned}$ |
| German (Subsidiary level) (Higher level) | 4 or higher 4 or higher | GER 101 <br> GER 101, 102 | $\begin{aligned} & 4 \\ & 8 \end{aligned}$ |
| History (Subsidiary level) <br> (Higher level) | 4 or 5 $6 \text { or } 7$ | HIS 100 (or HIS 101 if student has already received credit for HIS 100) HIS 100, 101 | 3 |
| History - American (Subsidiary level) <br> (Higher level) | 4 or 5 $6 \text { or } 7$ | HIS 102 (or HIS 103 if student has already received credit for HIS 102) HIS 102, 103 | 3 |
| Physics (Subsidiary level) <br> (Higher level) | 4 <br> 5 or higher | PHY 211 <br> PHY 211 and PHY 213, or PHY 220 | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ |
| Psychology <br> (Subsidiary level) <br> (Higher level) | 4 or higher 4 or higher | $\begin{aligned} & \text { PSY } 100 \\ & \text { PSY } 100 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |
| Mathematics (Higher level) | 4 or higher | MAT 120, 220 | 10 |


| Spanish (Subsidiary level) | 4 or higher <br> (Higher level) | SPI 101 | 4 |
| :--- | :--- | :--- | :--- |
| 4 or higher | SPI 101, 102 | 8 |  |

## OTHER NON-TRADITIONAL CREDIT

Additional types of nontraditional credit are available:

## a. Portfolio Development (PD)

Portfolio takes the place of a standardized test in evaluating college level learning that students may have acquired through their personal, volunteer or work experience. A portfolio is a set of formal written documents that demonstrate experiential learning equivalent to the learning objectives of a specific course. A 2-semester hour mandatory course (PRL 101) teaches students how to prepare a portfolio. Portfolios are evaluated by faculty who determine whether a portfolio's content and the student's experience meet the learning objectives of a particular course. Credit is granted upon recommendation of the appropriate faculty and with the approval of the appropriate department chair and dean. Students may request up to 32 semester hours toward a bachelor's degree and 16 semester hours toward an associate degree. To learn more about the Portfolio, attend the free workshop "Options for Adult Learners" offered throughout the year. For a workshop schedule, search on the keyword "option" at: http://nkuconnections.nku.edu. For more information about the Portfolio program, visit: http://edoutreach.nku.edu, call the Educational Outreach Office at 859-572-1500, or send an e-mail to: edoutreach@nku.edu.

## b. Military and Department of Defense (DOD)

Credit may be earned for courses successfully completed by an individual in residence at approved military and DOD schools. Courses approved and recommended by the American Council of Education's publication, Guide to Evaluation of Educational Experiences in the Armed Forces will be considered for credit. A maximum of 32 semester hours may be earned. Students should petition the Office of the Registrar for review of courses and present appropriate documentation of military course work.

## c.Vocational (Articulation)

Credit may be awarded to an applicant entering Northern Kentucky University in the program area of specialty upon completion of a postsecondary vocational program in the Northern Kentucky Vocational Region. For more information, contact the Construction Management Department.

## d. National Occupational Competency Testing Institute (NOCTI)

Credit may be earned through standardized tests to assess competency in technical or trade areas of industrial education teachers. Contact the Construction Management Department, 859-572-5761.

## e. American Council on Education (ACE) Non-Collegiate Sponsored

 InstructionCredit may be awarded based on educational programs offered by many large corporations or non academic institutes. Only programs approved and recommended by The American Council on Education will be considered for credit. A maximum of 32 semester hours toward a bachelor's degree and 16 semester hours toward an associate degree may be earned. Students may request evaluation of credit by sending the ACE transcript "Registry of Credit Recommendations" and appropriate course outline(s) to the Office of the Registrar, AC 301, Nunn Drive, Northern Kentucky University, Highland Heights, KY 41099 or phone 859-572-6430 for more information.

## f. Correspondence Courses

1. No more than 9 semester hours required for a degree may be earned by correspondence.
2. A student desiring to enroll in correspondence courses at another institution while he/she is a student at NKU must obtain prior permission from the appropriate academic dean if he/she wishes to
transfer the earned credit to NKU. Correspondence courses in which a grade of $C$ or higher is earned will be transcripted as hours earned or pass $(P)$ credit only up to 9 semester hours.

## g. World Language Incentive Program

Students who enroll at NKU in world language courses (except English) at the 102 level or higher and who complete two courses in the same language with a grade of $C$ or better may receive credit for all world language courses in the 101, 102, 201, 202 sequence (same language) below their initial enrollment level at NKU for a maximum of fourteen hours of credit. Transfer students are eligible for credit under this program if they complete at least one additional course wit a grade of $C$ or better in the foreign language at NKU.
To participate, a student must (1) take the WebCAPE online placement test if available for language at the beginning of the language student at NKU, (2) submit a form describing previous language experience and expressing the intention to participate in the incentive program, and (3) demonstrate an appropriate level of knowledge and motivation in the course in which enrolled. Neither the WebCAPE score nor enrollment in a course beyond the initial one guarantees participation in the program. All policies of the Department of World Languages and Literatures regarding world language placement posted online at http://minerva.nku.edu/ placement.htm or included in the NKU catalog apply to this program. Credit awarded to a student based on the AP or CLEP exams in a specific language will be deducted from the amount of credit awarded through the World Language Incentive Program. Requests for credit from students who complete courses in the 101-202 sequence out of order require the approval of the College of Arts and Sciences Dean and the Vice Provost.
It is the student's responsibility to request that the retroactive incentive credit be entered on student's transcript after completion of the appropriate course or courses. A form for this purpose is available in the office of World Languages and Literatures, Landrum 500.

## ACADEMIC STANDING FOR UNDERGRADUATES

a. Good Standing

A student is in good standing when he/she has more than 16 quality hours with a cumulative grade point average (GPA) that meets or exceeds 2.00 . A student with $0-15$ quality hours is in good standing with a cumulative grade point average (GPA) that meets or exceeds 1.66.
b. Academic Probation/Suspension

A student who fails to meet the cumulative 2.00 GPA required for good standing is placed on academic probation for the next enrolled semester.

A student on academic probation will be suspended unless:

1. The student earns a 2.00 GPA or higher for the probationary semester (semester GPA. or
2. The student meets or exceeds the following cumulative GPA standards at the end of the probationary semester:
Cumulative GPA of:
0.00 for $0-15$ quality hours
1.25 for $16-30$ quality hours
1.50 for $31-45$ quality hours
1.75 for $45-59$ quality hours
2.00 for $60+$ quality hours

Quality hours are semester hours attempted in courses numbered 100 or above. A student whose grade-point average is below the cumulative 2.00 GPA required for good standing, but above the cumulative GPA standards for suspension, will be continued on academic probation for the next semester enrolled.

A student on academic probation who has been previously suspended and who is suspended a second time will receive the penalty of a second suspension.

No student will be suspended prior to accumulating 15 quality hours or without being placed on probation for the preceding semester.

## Probation

A student on academic probation is not allowed

1. to serve as an officer or committee member in any campus organization;
2. to participate in any University extracurricular activity or in the activity of any University organization if the participation involves expenditure of an appreciable amount of time;
3. to carry more than 13 semester hours during any fall or spring semester;
4. to carry more than 6 semester hours at one time during summer sessions or more than one course in intersession.

## Suspension

1. A student suspended from NKU or another institution for the first time for academic reasons is required to remain out of school for at least two full semesters (the summer sessions taken together being considered as one semester).
2. After serving the period of suspension, a student may be reinstated or admitted to the University. To be reinstated or admitted, the student must meet with the appropriate college's associate dean or school's chair to discuss academic standing and future direction. This meeting must occur by August $\mathbf{1}$ for fall semester, December 1 for spring semester, and May 1 for summer sessions. If the suspended student has remained out of school for more than four years, the student must complete and submit an application for readmission to the University once reinstatement has been approved.
3. Students transferring to NKU, ineligible to return to their previous institution(s) because of academic deficiencies or if they have a cumulative G.P.A. of less than 2.0 , will follow the same process described above in \# 2.

## Second Suspension

A student suspended a second time will not be reinstated to NKU except in unusual circumstances and then only on recommendation by the appropriate dean and approval by an ad hoc group, consisting of the appropriate associate/assistant dean from each of the undergraduate colleges plus the Director of the Academic Advising Resource Center. To petition for reinstatement after a second suspension, the student must meet with his/her appropriate associate/assistant dean or the Director of the Academic Advising Resource Center by the dates specified above and then must submit an appeal letter to the above described group. If reinstatement is approved, the student must then complete and submit an application for readmission to the University.

## ACADEMIC BANKRUPTCY FOR UNDERGRADUATES Prerequisite Conditions

A returning student who has not attended NKU for a minimum of two full consecutive academic terms (i.e. fall, spring, summer [excluding winter term]) may petition for academic bankruptcy of NKU coursework or coursework from a previous institution on a one-time only basis. Beginning fall 2004, first-time transfer students enrolled at NKU may also petition, on a one-time only basis, for academic bankruptcy for any full term(s) of coursework completed at an institution previously attended.

## Bankruptcy Policy

Upon successful completion of the first 12 semester hours of collegelevel coursework attempted at NKU with a grade-point average of 2.0 or higher, the Office of the Registrar will remove the calculation of the peti-

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tioning student's grade-point average, all classes in all semester(s) (all summer sessions in one year will be counted as one semester), terms, and sessions identified in the approved Undergraduate Academic Bankruptcy Petition. A student's NKU transcript will indicate the term(s) bankrupted. Although the courses in the terms affected will be removed from the calculation of the grade point average, they will remain a part of the student's transcript at NKU.

Failure to earn a grade-point average of 2.0 or higher for the first 12 semester hours of college-level coursework attempted at NKU upon returning to NKU will result in denial of the petition. Academic bankruptcy may be petitioned for only once. An updated copy of the transcript will be furnished to the appropriate dean, advisor and the student. It is the student's responsibility to contact any agency providing financial assistance to determine the effects of the academic bankruptcy on past or future benefits.

Any bankrupted courses the student passes at an acceptable level and that are among requirements for general education will be applied, but without awarding of credit, toward those requirements. Such application for major/minor requirements is subject to written approval by the appropriate chair.

Bankrupted courses, even though passed, do not apply to the minimum of 128 semester hours required for the bachelor's degree or to the minimum 64 semester hours required for the associate degree.

## Procedure

The student should obtain and complete an Undergraduate Academic Bankruptcy Petition form from the Office of the Registrar, processing area; at this time, policy requirements will be reviewed and explained by a processing specialist.

## RELATED POLICIES

## Course Load

1. The following course loads apply for each semester/session:
a. The suggested undergraduate course load for fall and spring semesters is 16 semester hours. Except in special circumstances the maximum course load in fall or spring semester at NKU is 18 semester hours (including audit, residence, correspondence, off-campus, and consortium courses) or the amount specified in the curriculum for the particular semester, whichever is larger. Maximum course load for all summer sessions is 15 semester hours.
b. A student may take only one intersession or winter term course each year.
c. A student may take up to 6 semester hours during each of the five-week summer sessions for a total of 12 semester hours.
NOTE: It is normal that students should expect to spend 5-6 hours per week in course-related work outside of class time in a 3 semester hour course. This means that students carrying 15 semester hours may need to spend a minimum of 25-30 hours per week in outside class work. This must be considered in making out student schedules.
2. A student who has attained a grade-point average of 3.00 or higher for a total of at least 15 semester hours for the preceding semester may be permitted by his/her dean to carry up to 21 semester hours.
3. A student with particular problems concerning course load should see the appropriate dean.
4. The minimum course load for a full-time undergraduate student at NKU is 12 semester hours in a fall or spring semester and 9 semester hours in summer.
5. A student on academic probation may not take more than 13 semester hours in a fall or spring semester or more than 6 semester hours in summer.

## Grading System

The grading system at NKU is based on the following
descriptions:

A represents exceptionally high achievement as a result of aptitude, effort, and intellectual initiative.
$B$ represents high achievement as a result of ability and effort.
C represents average achievement, the minimum expected of a college student.
$D$ represents the minimum passing grade except for courses taken on a pass/fail basis. The grade of $D$ may not be awarded in graduate courses.
$F$ indicates failure in a course. Credit in a course where an $F$ was earned can be obtained only by repeating the course successfully.
I means that part of the work in a course remains incomplete. It is given only at the student's request and where there is reasonable possibility that a passing grade will result from completion of the work. An I must be completed by midterm of the next full semester; otherwise a grade of $F$ is assigned. In unusual circumstances the appropriate dean may grant an extension of time, to a specified date, for removal of an $I$ and will notify the registrar of such action. In no case, however, will more than two extensions be granted for an $I$.
$K$ represents satisfactory progress in courses identified by the department, the dean, and the registrar as developmental and/or remedial, or Music courses indicated by department. Students receiving $K$ will be required to register for that course again the next semester. During the semester in which the student achieves proficiency in the course that was previously assigned the grade of $K$, the instructor will assign a standard letter grade of $A, B, C$, etc., or a $P$ if the course is offered only on a pass/fail basis. At that time, semester hours attempted and semester hours earned in the course will appear on the student's permanent record.
$N$ represents satisfactory performance in those courses that carry no academic credit but must be taken in conjunction with other courses.
$P$ represents satisfactory performance, or "passing," in those courses graded pass/fail. Only the grade of $C$ or better is considered passing on the pass/fail system.
$T$ represents an audit (no academic credit awarded).
$W$ represents an official withdrawal from a course. The $W$ will appear on the permanent academic record but will not be used in computing the student's grade point average.

Effective fall 2009, NKU will also include plus and minus grades in addition to the above descriptions. For example, A grades will include A+, A, and A-, etc.

## Auditing a Course

1. A student may enroll for an audit ( $T$ ) grade when academic credit is not desired. The same registration procedures are followed and the same tuition/fees are charged as for credit courses. Audited courses do not apply to any degree or certificate programs.
2. Class attendance will be consistent with University policy. Other course requirements will vary depending upon the nature of the course and the individual instructor or program.
3. Any change from audit to credit or credit to audit must be done by the last day to register for a class. An Audit form must be completed and filed in the Office of the Registrar, AC 301 by the last day to register or enter a class. Refunds for withdrawals from audited courses are calculated according to NKU policy.

## Grade Change

1. If due to an error a grade change is required, it must be accomplished by midterm of the next full semester after the issuance of the incorrect grade.
2. For $I$ grades being changed to letter grades, the instructor and department chair must approve the change; for letter grade changes to another letter grade, the instructor, the department chairperson, and the appropriate dean must approve.
3. If the time limitation stated above has been exceeded, the instructor must attach a written explanation of the causes for the delay and deliver the change to the chair, who will forward any approved changes to the appropriate dean's office.
4. Changes become official when received and recorded by the Office of the Registrar.

## Pass/Fail—Student-Initiated Option

1. The student-initiated option to take a course pass/fail encourages students to experiment in academic disciplines by enrolling in courses they may not take normally if subjected to the same grading pressures incurred as in their major area of study. For this reason, pass/fail can contribute substantially to a student's breadth of experience at NKU.
2. To exercise the option to enroll in a course on a pass/fail basis, the student must complete a form obtainable at the Office of the Registrar. This can be done at the time of registration but not later than the last day to register or enter a class for that semester/ term as listed in the appropriate online Academic Calendar.
3. Taking courses pass/fail under the student-initiated option is subject to the following restrictions:

The individual must be a bachelor's student who has attained junior standing (having earned 60 semester hours or more).
Courses taken pass/fail must be elective in nature and cannot be applicable to specific general education, major, or minor/area of concentration requirements.

Pass/fail courses may be applied toward upper-division course requirements.
No more than 12 semester hours toward graduation may be completed through the student initiated pass/fail.
Only the grade of $C$ or above will be considered passing when courses are taken under the pass/fail option; the grades of $D$ and $F$ will be recorded as failing grades.
The grade of $P$ will not be computed in the grade-point average but will be credited as semester hours earned and will count toward graduation under the restrictions previously mentioned; the grade of $F$ will be computed in the student's grade-point average as hours attempted.
Students must declare their intention to take a course under the pass/fail option no later than the last day to register or enter a course for a specific semester or term as stated in the online Academic Calendar.
The choice to receive a traditional letter grade or a pass/fail grade cannot be changed after the last day to register or enter a course except by withdrawal or by repeating the course.
4. Under the student initiated pass/fail policy, the instructor will not know who is taking the course for a traditional letter grade or pass/fail. At semester end, the instructor will submit traditional letter grades for all students. For those students taking the course as pass/fail, grades will be converted by the Registrar.
5. Should a student change major or minor/area of concentration after having taken a course under the student-initiated pass/fail option, any discussion regarding acceptance of the course for major or minor/area of concentration requirements would be made on an individual basis by the appropriate department chair. If needed, and with the student's permission, the instructor's record of the original letter grade could be consulted in such a case.

## Grade Point Average (GPA)

1. The grade point average (GPA) is the ratio of the number of quality points earned to the number of semester hours attempted in courses numbered 100 and above.
2. An $A$ counts 4 quality points for each semester hour earned; a $B$, 3 points; a $C, 2$ points; a $D, 1$ point; and an $F$, zero. Thus a stu-
dent would earn 12 quality points for an $A$ in a 3 semester hour course and 4 quality points for a $C$ in a 2 semester hour course.
3. To compute the GPA, add all quality points and divide this sum by the number of semester hours attempted. The GPA for the courses above would be $16 / 5$ or 3.2 .
4. Grades of $I, K, N, P, T$, and $W$ do not affect the GPA; a grade of $F$ does affect it.
5. NKU computes both a GPA for work attempted at NKU and a cumulative GPA which includes all coursework attempted at all institutions attended by a student.

## Honors Lists

1. All undergraduates attempting at least 12 semester hours earning quality points (excluding developmental coursework) who achieve a grade point average of 4.00 at the completion of a semester's work will be appointed to the President's Honors List.
2. All undergraduates attempting at least 8 semester hours earning quality points (excluding developmental coursework) achieving a GPA of 3.60 or greater at completion of a semester's work will be appointed to the Dean's List.
3. All undergraduates attempting at least 3 semester hours earning quality points (excluding developmental coursework) achieving a GPA of 3.60 or greater at completion of a semester's work will be appointed to the Scholar's List.

## Repeating/Retaking a Course

1. A student wishing to repeat a course must file an Option to Repeat form with the Office of the Registrar, AC 301. Forms available via Norse Express.
2. Only students receiving a grade of $D$ or $F$ are permitted to repeat a course once for each of four courses. It is permissible to repeat a required course a second time, i.e., a major/minor or general education requirement, exercising one of the student's four options. In any event, the last grade prevails and the original grade is removed from the GPA computation.
3. The student must petition his/her dean, in writing, for any exceptions to the repeat policy. If more than four $D$ or $F$ grades are received, the student should always petition for an exception to the repeat policy before retaking courses.
4. If the four repeat options have been exercised, and a student is required to retake a course in which a $D$ or $F$ was received to proceed with her/his academic program, both entries will remain on the permanent record. Both grades will be calculated into the GPA and for fulfilling major requirements, if applicable. However, if the course is passed both times, only the initial passing grade is used to satisfy institutional semester hour requirements for a degree. The student can petition his/her dean for more repeats
5. Courses in which a $C$ or higher was earned will not be retaken nor will credit be earned unless it is a course such as an independent study where the course content is different or is specifically referred to as repeatable in the course description. If it is determined in the degree audit process that a student has the same non-repeatable course both with $C$ or better grades on his/her record, the grade for the first time the course was passed will be the course counted toward all institutional and program requirements (e.g., hours earned, GPA, honors, program, etc.). Upon written recommendation by the department chair, an exception to the repeat policy may be obtained for students who earned $C$ or better grades. This exception applies to coursework which places time restrictions on course applicability in a specific program. An example may be a nursing course taken more than five years ago. Such written requests must be submitted to the Office of the Registrar.
6. The repeat option may not be invoked for any course previously passed on the student's academic record at the time any degree

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was awarded by NKU. Similarly, if transfer work was included as part of the hours used for an AAS degree and $D$ and $F$ grades were included on the record, the transfer work may not be reevaluated to eliminate these grades in the computation of the GPA even if the student declares a new catalog.
7. The repeat policy is applicable to Northern Kentucky University coursework and transfer work from another institution.
8. Discontinued courses may not be repeated unless a new course covering the same content has been created to replace the discontinued course. Verification from the department chair is required before such a substitution may be allowed. Under no circumstances may one course of different content substitute for another under the repeat policy.

## Declaration/Change of Major

The University finds it advantageous to permit students to declare a major at the time they register as freshmen. Under no circumstances, however, must this initial declaration be considered as binding. It is quite possible for freshmen students uncertain about their major to declare an "undecided" major.

Students seeking the bachelor's degree will be required to declare a major before completion of 50 semester hours earned. Transfer students entering with more than 50 earned semester hours will be required to declare a major by the end of their first semester of enrollment.

Students seeking the associate degree will be required to declare a major before completion of 25 semester hours earned. Transfer students entering with more than 25 earned semester hours will be required to declare a major by the end of their first semester of enrollment.

It is very important that the student keep the Office of the Registrar notified of decisions concerning his/her major. It is the student's responsibility to file a Declaration/Change of Major form with the academic department and the Registrar.

## Tuition Non-Payment

Students dropped for non-payment of tuition during the semester are not to attend classes.

## Student Classification

Freshman
Sophomore
Junior
Senior
$0-29$ semester hours
$30-59$ semester hours
$60-89$ semester hours
90 or more semester hours

## POLICY ON TRANSFER OF UNDERGRADUATE CREDIT Transfer of Undergraduate Credit

a. Coursework from a regionally accredited institution or institution with approved articulation agreement will be considered for awarding of transfer credits.
b. The cumulative grade point average at NKU will be based on all work attempted at previous regionally accredited institution(s) and NKU. GPA from previous institutions will be recalculated based on NKU's Policies and Procedures. Students attending NKU prior to Fall 2004 are exempt from this recalculation and D's and F's grades are not accepted. Transferred semester (quarter hours earned at institutions will be converted to semester hours) hours are applied toward the total hours required for graduation from NKU.
c. Students who earn transfer credit (or a combination of transfer credit and NKU credit) within one semester hour of that necessary for completion of a general education category will be considered to have completed that category if all content requirements are fulfilled.
d. In addition, a transfer student must:
(i) satisfy the requirements of his/her major program. A transfer student may not be awarded credit for all the courses in a major. It is recommended that at least half the work in a major
be taken at NKU, but majors may set specific limits on the amount of transfer credit granted. The appropriate chairperson will make final determination requirements of a student's major.
(ii) meet the grade-point requirements of NKU for the present semester in college (e.g., a student who has enrolled in her/his first semester at NKU must achieve a minimum cumulative GPA of 2.00 to avoid probation. See "Probation and "Suspension" on page 31". A student placed on probation /suspension at another institution must confer with NKU's Director of Admissions prior to a decision concerning acceptance.
e. Effective fall semester 1991 and for subsequent semesters, NKU will no longer accept coursework from institutions that are not regionally accredited unless a formal articulation agreement has been approved.
f. Students from non-regionally accredited institutions have the option to earn prior learning credit through NKU's non-traditional credit opportunities of portfolio development, advance standing examination, and College Level Examination Program (CLEP) testing.

## Transfer of Credit from Professional or Graduate Schools to NKU's Bachelor's Programs

a. A student who receives early admission to certain professional or graduate schools may, under certain conditions, transfer credits back to NKU from that school to meet NKU's requirements for graduation with the bachelor's degree. Such schools are usually medical schools, dental schools, law schools, schools of social work, and schools of veterinary medicine. To be excluded from this group are schools that grant a bachelor's degree to students who transfer credits to them. Also excluded are professional schools not accredited by a regional accrediting association for institutions of higher education.
b. To meet minimum conditions, the student must complete at least 90 semester hours of work at NKU, meet general education requirements of the University before he/she leaves, and satisfy requirements of her/his major.
c. Courses taken at the graduate or professional school may be used to meet major requirements at the discretion of the student's adviser and department chair with the approval of the Office of the Registrar and appropriate dean.
d. Transfer of credit must be effected at the end of a student's initial year of post-bachelor's study.
e. A student who receives early admission to a graduate or professional school and who meets the above conditions is urged to discuss with his/her chair the possibility of transferring credit from the school to NKU. Students permitted to transfer such credit must have an appropriate transcripts sent to NKU and must also complete application for the bachelor's degree from NKU.
f. Students are warned that in a few cases their early admission to graduate or professional school may permanently disbar them from licensure in certain states. It is the responsibility of the student to ascertain requirements of the state in which he/she plans to practice.

## Academic Advising

In recognition of the value of regular consultation with a knowledgeable University official, NKU makes academic advising available to all students through the various academic departments and the Academic Advising Resource Center (see.)

These services, highly recommended, are required by specific academic departments. Although the University reserves the right to evaluate the student's course of study, to prescribe requirements as to programs, and to enforce prerequisites, corequisites, and similar course restrictions, responsibility for completing program requirements and selecting courses rests with the student.

## Experimental Courses

Experimental courses in a variety of subjects are offered each semester. All carry regular academic credit. Many are crosslisted by cooperating departments and programs for elective credit toward the major in the respective disciplines. Some courses may receive general education credit.

## COOPERATIVE EDUCATION

Cooperative Education at NKU is an academic option that incorporates related work experience into the student's program of study. This learning experience involves gainful employment, and academic credit is earned and applied toward associate and bachelor's degrees. The employment experience is planned, supervised, and coordinated by employers, faculty coordinators, and the Career Development staff.

## Requirements

To be admitted to the Cooperative Education program, students must have an overall GPA of at least 2.20 (based on a 4.00 scale). This gradepoint average must be retained throughout the student's academic experience involving cooperative education.

To qualify as candidates for the program, associate degree students must have completed 15 semester hours; bachelor's degree students, 30 semester hours. Students are required to participate in the co-op program for two semesters. Students must apply and be approved prior to registering for co-op credit. Interested students should contact Career Development, 859-572-5680, or the Associate Dean in the College of Business.

## Patterns of Cooperative Employment

Two patterns of employment are available:

Alternating-Students will be employed full-time (minimum of 40 hours per week or equivalent) one semester and will be in school full-time the following semester. Students will normally engage in two cooperative education terms. While on an alternating work assignment, students will maintain full-time status for purposes of student benefits and activities.

Parallel-Students will be employed half-time (minimum of 20 hours per week or equivalent) and will be enrolled in school for a minimum of 6 semester hours of coursework in addition to Cooperative Education each semester. Bachelor’s degree students will usually engage in four Cooperative Education terms in the parallel mode; associate degree students, two terms.

## Academic Credit

Credit earned in Cooperative Education counts toward NKU graduation requirements for the associate or the bachelor's degree. Credit is not considered as "add-on" credit. Bachelor's degree students may apply a total of 12 semester hours toward the requirements; associate degree students, 6 semester hours. Cooperative Education is graded pass/fail.

Cooperative Education credit does not replace any general education requirements. The application of Cooperative Education credit toward the degree will be determined by the student and the academic advisor.

Academic loads may vary depending on special arrangements agreed to by a student's academic unit and the Career Development Center.

Cooperative Education courses have the prefix CEP.

## Tuition

Cooperative Education students pay the usual tuition fees (no special fees).

## ACADEMIC REGULATIONS

## ALCOHOL AND DRUG ABUSE POLICIES AND EDUCATIONAL PROGRAMS

NKU respects the integrity and total development of its students and recognizes the educational importance of all co-curricular experiences in which students participate. It also joins with the Drug-Free Schools and Campuses Bill (34 CFR Part 86) in offering programming for students about alcohol and substance abuse.

NKU prohibits unlawful possession, use, or distribution of drugs and alcohol on its property or as part of its activities. A clear statement of unacceptable conduct and consequences related to substance abuse is found in NKU's student handbook, Code of Student Rights and Responsibilities, and is restated below.

Students may be accountable to civil authorities and the University for acts that constitute violations of law and of this code. Those charged with violations are subject to University disciplinary proceedings pending criminal proceedings and may not challenge University proceedings on grounds that criminal charges for the same incident have been dismissed, reduced, or not yet adjudicated.

The following misconduct is subject to disciplinary action: unauthorized distribution, or possession for purposes of distribution, or use of any controlled substance or illegal drug, as defined by Kentucky Revised Statutes, Chapter 218A, on University premises or at University-sponsored activities manifested under influence of a controlled or other intoxicating substance to the degree that there is danger to self, others, or property, or there is unreasonable annoyance to persons in the vicinity; and aiding and abetting any conduct described above.

The legal drinking age in Kentucky is twenty-one. Individuals are responsible for knowing the laws applying to substance abuse in the Commonwealth. In particular, individuals should be aware of legal consequences for violation of the legal age, use of false identification, drunk driving, and sale or distribution of illicit drugs.

Recognizing that alcohol and drug abuse is a serious problem in our society, NKU offers a variety of educational and assistance programs to the student population. An alcohol/drug abuse awareness week is held twice annually. An Alcoholics Anonymous meeting is held weekly on campus. Residence hall programs on drug and alcohol abuse are held annually. Alcohol/drug training sessions are held annually for residence hall assistants. Information and literature on substance abuse are available in the Student Health Office, University Center 300. Students who may have alcohol or other substance-abuse problems can be assisted for confidential evaluation and referral to appropriate community agencies.

The Women's Center is a resource center for faculty, staff, and students. The staff is available to assist with and conduct programming for university classes, residential hall activities, and campus-wide events. The focus of this office is to create a drug-free environment by raising awareness of drug and alcohol issues and promoting healthy life choices.

Early recognition, intervention, and treatment for substance abuse are necessary to avoid compromises in physical and mental health. Health risks associated with substance abuse include but are not limited to physical dependence, psychological dependence, tolerance, alterations in the immune system, digestive problems, liver complications, neuropsychological complications, nutritional deficiencies, certain cancers, cardiovascular complications, nasal septal deterioration, respiratory complications, an increased risk of contracting sexually transmitted diseases, placenta transfer resulting in low birth weight, mental retardation, congenital malformation, and neonatal addiction.

In addition, moral deterioration and deterioration of personal relationships, impaired learning, violence, injuries, accidents, drunk driving, acquaintance rape, and unwanted pregnancies may result. Without early intervention and treatment, death may occur.

For further information on substance abuse, phone the Counseling

Office, University Center 320, at 859-572-6373.

## ADDING OR DROPPING A COURSE

The University online Registration Guide and online Academic Calendar lists the dates when a student may add a course or withdraw from a course after completing registration. Drop/add may be accomplished via Norse Express for Students or in person at the Registrar Service Center, AC 301. Drop/add transactions are not official unless processed via one of these methods. The regulations below apply to regular courses in fall and spring semesters. They also apply to all short courses, especially summer and winter offerings, in a time sequence proportional to length of the session. When adding courses, see course-load policy for allowable limits.

## Course Withdrawal Grade Policy

Students may withdraw from one or more courses only during the semester in which the course or courses are taken. The following policies apply:
a. During the first three weeks or equivalent of the term, official course withdrawals are not be reflected on the student's transcript. An instructor may initiate a withdrawal for any student who does not attend classes during this three-week period. Instructors check online for non-attendance procedure.
b. Students should also consult the online Registration Guide, published each semester, for more restrictive attendance policies that may lead to faculty-initiated withdrawals. Some courses or departments may require a student to attend the first class meeting or to notify the instructor of their expected absence in order to avoid an immediate faculty-initiated withdrawal from course.
c. Course withdrawals after the tenth week or equivalent are not usually allowed. In circumstances beyond the student's control, a $W$ may be granted with approval of the instructor, the appropriate chairperson, and the student's dean whose college offers the course. In cases not approved, the student will receive the grade of $F$ (failure).
d. Students withdrawing completely after the tenth week need only the approval of the dean of the student's major.
e. The instructor may not issue a $W$ as the final grade for students who did not withdraw prior to the tenth week or equivalent who are not covered by exceptions listed above.
f. The above procedures apply to all semesters.
g. The last dates to add or withdraw from a course are printed in the online Registration Guide and online Academic Calendar.
h. A student in the military reserves called into active status on an emergency basis who cannot complete course work for a given semester

1. will receive a withdrawal in each course with full refund if call-up is within the first 12 weeks of the semester.
2. may elect to receive the grade earned to-date in each course or receive a $W$ in each course with a full refund if call-up is during the 13th or 14th week of the semester, or
3. will receive the grade earned to date in each course if call-up is in the 15 th or 16 th week of the semester.

The student should present his/her orders at the Registrar Service Center or fax them to 859-572-6094. If the student does not yet have written orders, he or she will have 60 days in which to present the orders. A family member or friend may bring a copy of the orders in the student's absence. If this deadline is not met, the student's grades would revert to $F$, and he or she will not be eligible to receive a refund. In the situation in which the student has a choice, he or she must
take either the grades or drop all courses for a full refund.

## ACADEMIC APPEALS

Appeals to academic regulations are defined in the Code of Student Rights and Responsibilities. See http://www.nku.edu/~deanstudents for information and procedure.

## ACADEMIC COMMON MARKET

The Academic Common Market allows out-of-state students to pay instate tuition while studying selected academic programs that are not available in their home states. The list of programs included in the Academic Common Market is revised periodically to reflect the changing needs and offerings of participating states. The 15 states that participate in the Academic Common Market are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. For more information, contact the Academic Common Market Institutional Coordinator, Founders Hall 508, Northern Kentucky University, Highland Heights, KY 41099, 859-572-6578.

## CATALOG APPLICABILITY

## Catalog Applicability for Undergraduate Students

1. The curricular requirements stated in the catalog in effect when a student enters the University as a degree-seeking student, or in any subsequent catalog chosen, must be met. If a student chooses a subsequent catalog, this intention must be in writing to the Office of the Registrar, AC 301. The student must satisfy all institutional and program requirements for the desired degree under any subsequent catalog selected.
EXCEPTIONS: Students new to NKU in fall 2004 and thereafter will not have a catalog preference for purposes of having a NKU GPA or cumulative GPA. All coursework transferred after fall 2004 from another institution will be included in the cumulative GPA. Students transferring to NKU prior to fall 2004 will not have the option to change catalog year nor to have their coursework reevaluated to be included in cumulative GPA, nor will any coursework subsequently transferred from another institution be included in cumulative GPA. (This policy will change effective for students entering NKU beginning fall 2009, check with the registrar for additional information)
2. If a student's progress toward a degree is interrupted for four or more academic years from the last time he or she was regularly enrolled, all curricular requirements, both institutional and program, of the catalog in effect upon re-entry to the University must be met.
3. Except in unusual circumstances, the requirements of one catalog may be followed for no more than eight consecutive academic years from the time the student first enrolled. For all institutional and program requirements for a degree, the student will normally follow the catalog succeeding the one just expired unless the student designates in writing, to the Office of the Registrar, AC 301, a more recent catalog. Students should consult their academic adviser to determine their catalog of applicability.
4. Regulation appeals can be made to the appropriate academic dean.

## CHANGES IN ACADEMIC POLICIES/PROCEDURES

The University reserves the right to implement new policies/procedures deemed necessary to ensure compliance with those currently in effect.

## CLASS ATTENDANCE

Classroom participation is essential to the educational process in many disciplines. However, students may not be penalized with a lowered grade merely on the basis of non-attendance unless class participation is clearly essential to the educational goals of the course. If this is the case, students must be informed of the necessity to participate in classroom
activities. This information must be given to them no later than the fifth day of the semester. In any case, students are responsible for familiarity with material disseminated in the class and are not released from this responsibility because they cease to attend. It is assumed that students will be aware of the calendar deadlines for officially withdrawing from a course. If students do not officially withdraw prior to this deadline, and fail to successfully complete the required course work, a failing grade will be recorded.

## COURSE NUMBERING

Courses numbered 000 to 099 are orientation or developmental and may not be applied toward a student's classification or toward a degree. Courses numbered 100 to 199 are usually for freshmen; 200 to 299, usually for sophomores; 300 to 499, usually for juniors and seniors; 500 to 599, for juniors, seniors, and graduate students (unless specified elsewhere in this catalog); 600 to 699 , for graduate students only, and 800 to 899 for doctorate students only.

## COURSE PREREQUISITES AND COREQUISITES

A prerequisite is a requirement that must be satisfied before enrolling for a specific course. Students should not enroll in courses for which they lack the stated prerequisites. Students lacking the prerequisites may be withdrawn from these courses upon request of the instructor or academic department.

A corequisite is a course that must be taken in conjunction with another course. Students must enroll in corequisites during the same semester or summer session. A student enrolled in a course but not its corequisite will be withdrawn from that course upon request of the instructor or academic department.

## CONDITIONAL ADMISSION STUDENT COURSE TAKING POLICY

Students with any academic deficiency, such as a low ACT/SAT or Pre-College Curriculum deficiency, will be required to enroll each semester in at least one course that fulfills an academic deficiency until all academic deficiencies are successful completed.

Students must successfully complete all academic deficiencies prior to completing 45 earned hours. Should students fail to complete all academic deficiencies by 45 earned hours, they will not be permitted to continue enrollment at NKU. Students may attend another college to take courses which meet their academic deficiencies and then later return to NKU to finish their degree.

## FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

To the student:
In accordance with federal law, you have the right to inspect and review any and all official University records, files, and data incorporated in your cumulative record. You have the opportunity for a hearing to challenge the contents of these records to insure that they are accurate and not in violation of any of your rights. You also have the opportunity to correct, amend, or supplement any such records.

The only information that may be given out about you is directory information as defined in the Act unless you have specifically waived your rights within this act. If you have any questions concerning your rights within this act, please contact the Office of the Registrar, Northern Kentucky University at 859-572-5556 or e-mail the registrar at registrar@nku.edu.

## GREATER CINCINNATI CONSORTIUM OF COLLEGES AND UNIVERSITIES (GCCCU)

## General Information

Through an agreement with the Greater Cincinnati Consortium of Colleges and Universities, students at NKU may register for courses offered by other Consortium institutions. Course credit and/or grades will

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be posted on the transcript.
Half-time students at NKU may take up to 6 additional semester hours through the consortium. The cumulative total number of consortium semester hours is limited to 12 .

Graduate students are allowed 9 semester hours of combined transfer and consortium credits. Each program director has the discretion to accept an additional 3 semester hours of consortium-only credit, bringing the maximum possible non-NKU semester hours to 12. Any student denied the final consortium courses has the right of appeal through regular program and University channels.

Cross registration forms are available in the Office of the Registrar. Courses for credit toward an academic major must be approved by the chairperson of the major department.

Courses for general education credit must be approved by the College of Arts and Sciences.

Other than regular tuition charges at NKU, students will be required to pay course-related fees at the host institution. Catalogs and schedules of classes are available in the Office of the Registrar.

## Member Institutions

Member institutions of the Greater Cincinnati Consortium of Colleges and Universities include

Art Academy of Cincinnati
Athenaeum of Ohio
Chatfield College
Cincinnati Christian University
Cincinnati State Technical and Community College
College of Mt. St. Joseph
Good Samaritan College of Nursing and Health Science
Hebrew Union College/Jewish Institute of Religion
Miami University
Northern Kentucky University
Thomas More College
Union Institute and University
University of Cincinnati
Wilmington College
Xavier University
Through an agreement between the Greater Cincinnati Consortium of Colleges and Universities and Southwestern Ohio Council for Higher Education, NKU students may register for courses offered by the latter in fall and spring semesters if the courses needed are not available at the GCCCU schools. The same regulations apply as for the Greater Cincinnati Consortium.

The Southwestern Ohio Council for Higher Education includes
AFIT/RRD
Antioch College
Central State University
Clark Technical College
Edison State College
Kettering Medical College
Sinclair Community College
Southern State College
United Theological Seminary
University of Dayton
Urbana College
Wilberforce University
Wittenberg University
Wright State University
Guidelines:

1. Student enrollment between NKU and the consortium institution must be at least half-time, including both NKU and consortium hours. Undergraduate students must be enrolled for at least six hours with a minimum of three hours at NKU. Graduate students must be enrolled for at least five hours with a minimum of three hours at NKU. Summer students must have been at least half-time during the preceding spring semester. Students must be degree-seeking and may
enroll for no more than two courses at the host institution in one semester.
2. The course(s) requested must not be offered at NKU for one academic year, unless the student has officially applied for graduation with the Office of the Registrar.
3. Tuition commitments must have been met in full. Students enrolled less than full-time must pay for the additional credits taken through the consortium at NKU's tuition rate.
4. Students must observe all regulations of the host institution.
5. Credit hours earned under this program are considered as residence credit.
6. Quarter hours are converted into semester hours on a two-thirds basis.
7. Graduate students must obtain permission in advance from their adviser before taking courses at other colleges or universities. Written permission is required before registering for a consortium course. The consortium does not apply to students enrolled in or to courses offered through the Graduate Center.
8. For further information phone the NKU Office of the Registrar, 859-572-5556, or refer to the most recent Registration Guide.

## TUITION RECIPROCITY

## Undergraduate

Northern Kentucky University, the University of Cincinnati, Cincinnati State Technical and Community College, and Southern State Community College have instituted an Undergraduate Reciprocity Agreement. This agreement extends reciprocity tuition rates to those residents of certain Ohio counties who meet program/residency requirements. Since this agreement is subject to change on an annual basis, interested students should request current information from the Office of Admissions. Students must meet the following eligibility criteria:

- be a resident of Adams, Brown, Butler, Clermont, Clinton, Fayette, Hamilton, Highland, or Warren counties;
- have earned an associate degree from a University of Cincinnati branch campus, Cincinnati State Technical and Community College, or from Southern State Community College; and
- must be working toward a first bachelor's degree and not majoring in early childhood education, environmental science, criminal justice, or nursing.
Since this agreement is subject to change on an annual basis, interested students should request current information and application forms from

Northern Kentucky University<br>Office of Admissions<br>Lucas Administrative Center<br>Nunn Drive<br>Highland Heights, KY 41099<br>Telephone: 859-572-5220 or 1-800-637-9948

## ARTICULATION AGREEMENTS

Articulation, for the purposes of student transfer between campuses, refers specifically to "course articulation," e.g., the process of developing a formal, written agreement that identifies courses (or sequences of courses) on a "sending" campus that are comparable to, or acceptable in lieu of, specific course requirements at a "receiving" campus. Successful completion of an articulated course(s) assures the student and the faculty that the student has taken the appropriate course(s), received the necessary instruction and preparation, and that similar outcomes can be assured, enabling progression to the next level of instruction at the receiving institution. The articulation process is intended to ensure problem-free course and program transfer from one institution to another.

Students who wish to transfer should become familiar with the articulation agreements. Northern Kentucky University has established articulation agreements with universities and colleges for general education courses and for specific majors. For specific information, contact the Office of Admissions, 859-572-5220.

## UNIVERSITY AND STUDENT SERVICES

## AFRICAN AMERICAN STUDENT AFFAIRS AND ETHNIC SERVICES

University Center 209
859-572-6684
www.nku.edu/~aasa/
The Office of African American Student Affairs and Ethnic Services is responsible for designing and implementing services and cultural programs to promote a diverse campus and support the satisfaction and success of African American students and students from other ethnic minorities. The Office works with individual students, student organizations, faculty, and staff to meet the needs of these students.

## ATHLETICS

Albright Health Center 250
859-572-5193
Fax: 859-572-6089
www.nkunorse.com
The Intercollegiate Athletics Program provides a natural extension of secondary school programs, offering skilled student-athletes the opportunity to continue their educational and athletic experiences beyond high school. Membership in the National Collegiate Athletic Association Division II and Great Lakes Valley Conference, and adherence to the governing philosophies and regulations of these bodies, provide a framework for implementing this mission of the department.

NKU sponsors intercollegiate competition in thirteen varsity sports, six for men (baseball, basketball, cross country, golf, soccer, and tennis) and seven for women (basketball, cross country, golf, soccer, softball, tennis, and volleyball). In addition, the department has a student athletic training program, co-ed cheerleading teams, and offers numerous student employment opportunities.

Opening in Fall 2008 is The Bank of Kentucky Center, a 9,000 seat on-campus arena that will include for the 250 student athletes an academic center, film viewing/study room, strength and conditioning area and locker rooms.

## BOOKSTORE

University Center Ground Floor
859-572-5142
www.nku.bkstr.com
$\begin{array}{lll}\text { Hours: } & \text { Monday-Thursday } & 8: 30 \mathrm{am}-6: 30 \mathrm{pm} \\ & \text { Friday } & 8: 30 \mathrm{am}-4: 00 \mathrm{pm} \\ & \text { Saturday } & 11: 00 \mathrm{am}-2: 00 \mathrm{pm}\end{array}$
Extended Hours: At the beginning of Fall and Spring Semesters
Course Book Refunds: Course materials, new or used, can be returned for a full refund within 7 days of the first day of classes. You must have your original sales receipt to obtain a refund. Refunds will also be granted for a period beyond 7 days, to accommodate schedule changes, if proof of the dropped course is presented with the receipt. Book Buyback: everyday.

## CAMPUS RECREATION

First Floor of the Albright Health Center (HC 104)
859-572-5197
Fax: 859-572-6090
www.nku.edu/~camprec/

| Building Hours | Monday - Thursday | 6:30 a.m - 11:00 p.m. |
| :--- | :--- | :--- |
|  | Friday | 6:30 a.m. $-9: 00$ p.m. |


|  | Saturday | 8:00 a.m. - 4:00 p.m. |
| :--- | :--- | :--- |
|  | Sunday | Noon - 6:00 p.m. |
| Pool Hours | Monday - Thursday | Noon - 8:00 p.m. |
|  | Friday | Noon - 7:00 p.m. |
|  | Saturday | Noon - 3:45 p.m. |
|  | Sunday | Noon - 4:00 p.m. |
|  | Monday - Friday <br> Lap Swim Only | 6:30 a.m. - 8:00 a.m. |

The Campus Recreation Center (CRC) is located on the first floor of the Albright Health Center Building. The CRC includes a main activity area with three full-sized basketball courts that can also be utilized for volleyball and/or badminton, a $1 / 9$ mile four-lane indoor track, racquetball/wallball courts, a pool, a sauna, and a fitness center with free weights, selectorize weight machines, a variety of cardio machines, and a cardio theater system. Locks also available for check out or rental. Campus Recreation offers a variety of intramural sports, club sports, fitness classes, aquatic programs and outdoor adventure programs. All registered NKU students are members of the CRC and may purchase supplemental or family CRC memberships.

## CAREER DEVELOPMENT CENTER

University Center 230
859-572-5680
Fax: 859-572-6996
www.nku.edu/~cdc/
cdc@nku.edu
The Career Development Center (CDC) offers an integrated program of services that emphasizes the developmental nature of career decisionmaking: self-exploration services, world-of-work preparation, job searching skill development and career transition assistance. These services are available free of charge to students and NKU alumni, and services may include career counseling, resume assistance, job search coaching and interviewing preparation. The CDC is the university's liaison to area corporations and organizations, bringing these groups on campus via on-campus interviewing, job fairs and other events.

The CDC also coordinates the Cooperative Education (co-op) program on the NKU campus. Co-op integrates classroom learning with paid, real-life work experience in a related field. Participants get the best of both worlds: a quality academic degree and an impressive resume with practical work experience.

## COMPUTER LABS WITH ACCESS TO NORSE EXPRESS

 NS 430 ( 6 PCs)Residential Village, Kentucky Hall Lobby Loft (8 PCs)
Departmental Labs (various): see your chairperson

## DEAN OF STUDENTS OFFICE

## Student Union 3rd Floor

859-572-5147
Fax: 859-572-6173
deanstudents@nku.edu
www.nku.edu/~deanstudents/
The Student Development unit represents the core student service areas that promote the learning and personal development of students through an array of supportive services, programs, activities, and facilities

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designed to promote active student involvement in the life of the institution, and responsible citizenship on campus and in the surrounding community. The Dean of Students Office provides leadership and supervision of Campus Recreation, African American Student Affairs and Ethnic Services, Latino Student Affairs, Health, Counseling and Prevention Services, Student Life, Student Organizations, Student Media, Testing and Disability Services, University Center, Student Union, Student Government Association, University Housing, and New Student Orientation and Parent Programs.

In addition, the Dean of Students Office coordinates the resolution of issues that arise between or among faculty/staff and students through the administration of the student discipline system and student grievance processes. This Office is also an Ombudsman Service contact point for students who have problems, issues, or concerns that have not been addressed through other avenues. For information concerning the Code of Students Rights and Responsibilities, please check the Dean of Students web site.

## DEPARTMENT OF PUBLIC SAFETY

The Northern Kentucky University Police Department is a service and safety oriented department with broad enforcement powers and is dedicated to providing an atmosphere in which the mission of the University can be accomplished. Pursuant to KRS 164.955 and 527.020 (3): Police Officers of Northern Kentucky University are authorized to carry firearms at all times within the Commonwealth of Kentucky. Crime prevention and student safety are a priority and representatives of this department are actively involved in instructional and educational outreach. University Police has jurisdiction over all university properties. Jurisdiction is extended to off campus locations when requested by other law enforcement agencies.

The University Police Department provides a full range of law enforcement services, including criminal investigations, accident investigations, emergency services, and crime prevention education. The department operates 365 days a year, 24 hours a day, 7 days a week.

If an arrest is made, the individual will be transported to the Campbell County Jail for booking. Violations of University regulations which are not criminal offenses will be reported to the University's Chief Judicial Officer for further action.

The University Police Department reports the numbers and types of crimes monthly to the United States Department of Justice and the Kentucky State Police.

During an emergency the University Police can be reached by dialing 911.

## DISABILITY SERVICES

University Center 320
859-572-6373 Disability Services
e-mail disability@nku.edu
www.nku.edu/~disability/
NKU is an area leader in providing comprehensive programming and accommodation services to students with disabilities. Buildings and campus facilities are strategically located in a close geographical area providing accessibility for people with a disability. A wide variety of disability services and support programs are available through the Office of Disability Services including: consultation for disability issues for faculty, staff, and students; individual academic advising; advanced priority registration; interpreter service; liaison with outside agencies; adaptive software programs (Kurzweil 3000/1000, Zoomtext, Dragon Naturally Speaking), and exam proctoring. Students must be registered with the Office of Disability Services to receive reasonable academic accommodations. NKU also provides tutorial services, developmental classes, writing center, math lab, speech lab, and computer labs.

## EARLY CHILDHOOD CENTER

Business-Education-Psychology 147 859-572-6338
www.nku.edu/~ecc/
The NKU Early Childhood Center serves children of NKU students, faculty, and staff as well as members of the community. The Center has a 7:00 a.m. to 5:30 p.m weekday pre-school, pre-kindergarten and childcare program which serves children ages 2 through 5 , as well as a summer enrichment program for children ages 6-12. The Early Childhood Center is Accredited by the National Association for the Education of Young Children.

## EDUCATIONAL OUTREACH

Founders Hall Building, Room 305A
859-572-1500
edoutreach@nku.edu
http://edoutreach.nku.edu
Educational Outreach extends the NKU campus by offering creditbearing programs at the NKU Grant County Center, the Covington Campus, at employer locations, and by using the Internet and other distance learning technologies. The Program for Adult-Centered Education (PACE) is a structured yet flexible curriculum that allows working adult students to complete their degree in a timely manner. This office also assists working adults seek college credit gained through the Prior Learning/Portfolio Program as well as assisting students who wish to prepare for the National Registry-Basic Examination for Emergency Medical Technology (EMT). Additionally, Educational Outreach offers college classes at a variety of area high schools through its School-Based Scholars program, enabling students to complete college credits prior to high school graduation.

## E-MAIL

Visit http://www.nku.edu/~it/email/ for further information about how to access your FREE NKU email account or to learn how to forward your NKU email to your current email account. It is extremely important that you check your NKU email frequently, as the University relies upon it to communicate with students, faculty, and staff in a timely manner Concerns about accessing email may be addressed by phoning the Information Technology Help Desk at 859-572-6911.

## FINANCIAL ASSISTANCE

Lucas Administrative Center 416
859-572-5143 or Toll Free 1-888-225-4499
Fax: 859-572-6997
ofa@nku.edu
www.nku.edu/~ofa/
The Office of Student Financial Assistance is committed to helping the many students who are finding it increasingly difficult to afford a college education without some financial help. Northern Kentucky University participates in a variety of programs designed to assist students in need of financial aid to meet tuition and living expenses. The Office of Student Financial Assistance is responsible for administering and coordinating these assistance programs.

## GRANT COUNTY CENTER

390 N. Main Street
Williamstown, KY 41097
859-824-3600
grantcounty@nku.edu
http://grantcounty.nku.edu
Students living or working in proximity to Williamstown, Kentucky, may choose to take classes at the NKU Grant County Center. The Center provides access to general education and pre-major programs, as well as a Bachelor of Arts degree in Organizational Leadership through the Program for Adult-Centered Education (PACE), allowing working adult students to complete their degree in a timely manner. In partnership with the Grant County Foundation for Higher Education, classes, services and activities are also held year round. To locate classes offered at this location, see the website noted above, or visit the online Schedule of

Classes (http://express.nku.edu) and select Campus Code "GR" for Grant County.

## HEALTH, COUNSELING AND PREVENTION SERVICES

University Center 300
859-572-5650
www.nku.edu/~hcp/
Health, Counseling and Prevention Services provides a variety of preventive and acute care services to promote the physical and mental health of students. Registered nurses and nurse practitioners provide treatment for acute illnesses or injuries. Limited medications are available, as well as free testing for hearing, vision, diabetes, blood pressure, and pregnancy. Bi-monthly reproductive health clinics provide free pap exams, STI and HIV testing, and birth control options to students. Mental health professionals provide assessment, diagnosis and treatment for a variety of crisis, adjustment, relationship, and general mental health issues. Individual, group and couples treatment options are available. Health, Counseling and Prevention Services staff are also available for educational programming addressing mental and physical health needs of students. Faculty and staff are encouraged to consult with the staff regarding specific student needs. Student health insurance may be purchased through Health, Counseling and Prevention Services.

## IDENTIFICATION (ID) CARD

All-Card Administration
University Center 115
859-572-6016
http://access.nku.edu/allcard/
Imprinted with your photograph and assigned student ID number, the NKU All-Card is your official University identification. It also grants access to: NKU Email Account, Health Center, Copies (50\% discount), Parking Garage (50\% discount), Library Card, and Dining (discounted). All-Cards are automatically activated each semester for the duration of your attendance. If you are a new student, visit the All-Card office after classes begin to receive your ID card. Immediately report a lost or stolen card to the All-Card office; replacement cards may be obtained for a fee.

## INTERNATIONAL STUDENT AFFAIRS

Student Union 3rd Floor
859-572-6517
Fax: 859-572-6178
isa@nku.edu
www.isa.nku.edu
The Office of International Student Affairs (ISA) serves all nonimmigrant and permanent resident students attending the University. The ISA Office handles the admissions and testing of all visa types and permanent residents, and orientation for F1 students. In addition to recruitment and admissions the office staff offers support for international students, and guides them in their relations within and outside the University community so that they can successfully achieve their academic goals. The ISA office is the responsible office for F-1 related immigration advice and procedures and provides academic advising and retention support for new international students.

## KENTUCKY TRANSITIONAL ASSISTANCE PROGRAM (K-TAP)

BEP 239
859-572-5988
Fax: 859-572-5347
www.nku.edu/~ktap/
This program serves student parents who are receiving government benefits (K-TAP funds). It offers case management services to assist with on-and-off campus resources, student employment opportunities, and communication with Community Based Service staff. Student parents have access to computer lab, lounge, peer support and more.

## LATINO STUDENT AFFAIRS

Student Union 3rd Floor
859-572-5821
Fax: 859-572-1576
www.nku.edu/~la
The Office of Latino Student Affairs coordinates academic, cultural and social activities with the Literature and Language Department, African American Student Affairs, Honors Program, International Student Affairs and other organizations. The office also has a Mentor Program and a University 101 section for Latino students. It has developed strong partnerships with Latino organizations in Kentucky and Ohio. The Office of Latino Affairs serves as a consultant to businesses, K-12 educators and public service agencies, as a bilingual resource for NKU, and coordinates the Latino Community Outreach Advisory Council.

## LEARNING ASSISTANCE PROGRAM

See "ACADEMIC SUPPORT (TUTORING) PROGRAMS" on page 159.

## LIBRARY

Steely Library
859-572-5456
library.nku.edu
refdept@nku.edu
Hours/fall \& spring: Monday-Thursday 8:00 am-midnight

| Friday | $8: 00 \mathrm{am}-4: 30 \mathrm{pm}$ |
| :--- | :--- |
| Saturday | $11: 00 \mathrm{am}-5: 00 \mathrm{pm}$ |
| Sunday | $1: 00 \mathrm{pm}-$ midnight |

Study lounge: Sunday-Thursday open until midnight
Steely Library's faculty and staff are available to assist students in the use of its collections of books, periodicals, microforms, government documents, and electronic databases, many with full-text access. Services include access to the Internet, campus e-mail, research assistance, and interlibrary loan. Students may also use their ID and proof of current registration to borrow materials from area libraries which are members of the Greater Cincinnati Library Consortium (GCLC). Group study rooms and a quiet study area are available. Hours will vary during University holidays and between semesters.

## OMBUDS SERVICE TEAM

Dean of Students Office
Student Union 3rd Floor
Contact: Steve Meier 859-572-5771

## NEW STUDENT ORIENTATION: NORTHERN EXPOSURE

University Center 8
859-572-1967
arbinoa1l@nku.edu
http://www.nku.edu/~orientation
Northern Exposure, the New Student Orientation program, is designed to initiate an enduring connection between the students, their families, and the NKU community. Through interactive experiences, students will become informed and skilled consumers of the academic programs and comprehensive services offered by NKU. The program will allow students to make a connection earlier within their academic departments, register for classes, and learn about the variety of services and leadership opportunities available to them.

## REGISTRAR

Lucas Administrative Center 301
859-572-5556
Fax: 859-572-6094
registrar@nku.edu
www.nku.edu/~registrar/

## 42 Northern Kentucky University

The Registrar's Service Center assists students via registering for and dropping/adding of courses using Norse Express for Students; cross registration through Greater Cincinnati Consortium of Colleges and Universities; and processing requests to audit, pass/fail, or repeat courses, Declaration/Certification of Major, Minor, and Area of Concentration, Applications for Degree, Transcripts, Student Information Changes, and Enrollment Verification and enrollment certification of veterans and dependents of veterans.

## STUDENT AFFAIRS

Office of the Vice President
Lucas Administrative Center 836
859-572-6447
Fax: 859-572-1310
www.nku.edu/~vpsa/
The Division of Student Affairs provides an array of programs, services, activities, and facilities that promote academic achievement, student involvement, personal awareness, social and interpersonal development, leadership, and responsible citizenship. The Vice President for Student Affairs provides administrative leadership for the Division. The Division is organized into three units that encompass Intercollegiate Athletics, Student Development, and Student Services.

## STUDENT INFORMATION

Northern Kentucky University, consistent with the Family Educational Rights and Privacy Act of 1974, as amended, designates the following categories of student information as public or "Directory Information." This information may be disclosed by the institution for any purpose:

1. Name, address, telephone number, dates of attendance, class.
2. Previous institution(s) attended, major field of study, awards, honors (includes Dean's list), and degree(s) conferred (including dates).
3. Past and present participation in officially recognized sports and activities, physical factors (height, weight of athletes), date and place of birth.
Currently enrolled students may request withholding disclosure of any category of information. NKU assumes failure by any student to specifically request the withholding of categories of "Directory Information" indicate individual approval for disclosure. For further information, write or visit the Office of the Registrar Service Center, Lucas Administrative Center 301, Nunn Drive, Northern Kentucky University, Highland Heights, KY 41099.

## STUDENT LIFE

Student Union 3rd Floor
859-572-6514
Fax: 859-572-5774
studentlife@nku.edu
www.nku.edu/~studentlife/
The Office of Student Life serves as the coordinating office for the Northern Kentucky Leadership Institute; Activities Programming Board; Student Organizations; Fraternities and Sororities; Norse Leadership Society; and "N3"- Norse News Network, a weekly electronic newsletter delivered to all NKU students. Student Life provides a variety of cocurricular events each year, including lectures, concerts, educational programs, and other opportunities for social interaction.

## STUDENT MEDIA

University Center 376
859-572-5690
Student Media provides budgetary and advisory support to studentrun media, including WRFN, The Northerner, Licking River Review, Lost Cause Review, and NKU Expressed. Student Media serves the interest of all students by helping ensure the smooth operation of student-run,
independent media, consistent with the guidelines established by the Student Media Handbook.

## STUDENT RETENTION AND ASSESSMENT (SRA)

University Center 352
859-572-6497
Fax 859-572-6496
retention@nku.edu
www.nku.edu/~retention/
Student Retention and Assessment serves all undergraduate students who are dealing with issues that could interfere with their continued attendance and success at Northern Kentucky University. Services include:

Retention Alert: Faculty refer students who are experiencing academic difficulties, not attending class, or otherwise disengaged from the learning process. Students may self-refer if they are concerned about their academic success. SRA staff will help students articulate their goals, explore their options and develop action steps to achieve success.

Outreach Services: SRA contacts groups of students who are at risk for attrition. The goal of the outreach services program is to help students complete a particular class, semester or program that will lead to graduation.

Retention Consultations: SRA provides departmental consultations and specific retention data for units evaluating their retention rates and establishing retention goals.

## STUDENT SUPPORT SERVICES (TRiO)*

Business-Education-Psychology 209
859-572-5138
Fax: 859-572-5336
sss@nku.edu
www.nku.edu/~sss/
Student Support Services is a selective academic support program serving first-generation college students from low and moderate-income families. Each SSS scholar works closely with a professional Support Specialist in developing personal academic, career, and graduation success plans. These plans are supported through advising, academic counseling, career/major counseling, personal support, financial aid consultation, mid-term progress reports, super priority registration, and social/cultural activities. SSS Scholars are selected through an application process with 90 students accepted each fall. Applications are available by contacting the office or visiting our website. Funded by a grant for US Department of Education.

## STUDENT UNION

The Student Union is the hub for activity on the Northern Kentucky University campus. Offices and services located in the student union include: African American Student Affairs and Ethnic Services, All Card, Chartwells Food Service, Conference Services, Dean of Students, International Student Affairs, Lationo Student Affairs, Starbucks, Student Government Association, Student Life, and Student Union Operations.

## TESTING SERVICES

University Center 320
859-572-6373
Fax: 859-572-5874
www.nku.edu/~testing/
Testing Services provides academic and admission testing throughout the college experience. Admissions tests include the National and Residual ACT and computerized COMPASS (for non- traditional students). Admitted freshman who do not meet pre-requisite requirements for college-level coursework may be eligible for challenge testing in English, Mathematics, or Reading. Students must take challenge testing prior to attending an Orientation Program or first registration of classes.

Other tests offered are computerized CLEP (College Level Exam Placement-college credit by examination), PRAXIS (Professional Assessments for Beginning Teachers), PPST (Pre-Professional Skills Test). Contact the Testing Office to verify your testing needs. Please refer to www.nku.edu/~testing/ for a schedule.

## TRANSCRIPTS-OFFICIAL

Registration Service Center
Lucas Administrative Center 301
Fax: 859-572-6094
Transcripts of NKU coursework are available upon request without charge. Transcripts from institutions other than NKU that were submitted for admission purposes or credit evaluation will not be copied or returned to students. They must be obtained from the originating institution. Official transcripts can be requested via Norse Express Student Services or in person in the Office of the Registrar Service Center, AC 301. Official transcripts will not be available from the last day of classes until final grade processing is completed.

## GRADE REPORTS

Grade reports will not be mailed unless requested by the student via Norse Express. If requested, grade reports will be mailed within 7 working days of the grade submission.

## UNIVERSITY CENTER

Information Center
UC 100A
859-572-6588
www.nku.edu/~uc/
The University Center houses a variety of support services that are available to students and members of the University community. Offices and services located in the University Center include: Bookstore, Campus Post Office, Career Development Center, Health, Counseling and Prevention Services, New Student Orientation and Parent Programs, Student Media, Student Retention and Assessment, Testing and Disability Services, University Center Information Desk, and US Bank Banking

Center. Also included in the facility are several meeting rooms, ballroom, cafeteria, lounge space room, Otto Budig Theater and Student Involvement Center. Room reservations for these areas can be made through Space Scheduler at http://rooms.nku.edu or calling 859-5725760. Additional information concerning the building directory, hours of operation, and links to the offices and services located in the facility can be found on the University Center web site at www.nku.edu/~uc/. The University Center Information Desk, located on the 1st floor main plaza level, provides information concerning campus events, building/office locations, campus maps, and also serves as the University lost and found.

## UNIVERSITY HOUSING

NC 101
859-572-5676
http://access.nku.edu/housing
University Housing provides students with an affordable, safe and supportive environment that promotes success. The University provides a variety of living options including apartments, traditional residence halls and suites. Other amenities include computer labs, recreation and laundry facilities, study space, and 24 hour staffing. One fee covers all housing costs including high-speed Internet and expanded cable. Flexible meal plans and dining options are available to meet everyone's needs. Financial aid and scholarships can be applied toward your housing and dining fees.

## VETERAN'S SERVICES

Lucas Administrative Center 308
859-572-6625
Fax: 859-572-6094
registrar@nku.edu
http://www.nku.edu/~registrar/veteranservices.html
All degree programs at NKU are approved for students using the G. I. Bill. Students eligible for veterans educational benefits should contact the Veteran's Services Coordinator prior to registration.

## THE COLLEGE OF ARTS AND SCIENCES

## DEPARTMENTS

Biological Sciences; Chemistry; English; History and Geography; Mathematics; Music; Physics and Geology; Political Science and Criminal Justice; Psychology; Sociology, Anthropology, and Philosophy; Theatre and Dance; Visual Arts; World Languages and Literatures

## CENTERS/INSTITUTES/PROGRAMS

Center for Applied Ecology, Center for Integrative Natural Science and Mathematics, Latino/Multicultural Center for Regional Development, Institute for Freedom Studies, Organizational Leadership

## CONTACTING THE COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences located in Steely Library 410 may be reached during business hours by phone at 859-572-5494, or by facsimile at 859-572-6185. Interested persons are invited to browse the college's website at http://www.nku.edu/~artscience.

Dr. Kevin J. Corcoran, dean
corcorank1@nku.edu
Dr. Samuel J. Zachary, associate dean zachary@nku.edu
Dr. Debra Meyers, interim associate dean for interdisciplinary studies and director for integrative studies meyersde@nku.edu

Ms. Janis Cassiere, assistant dean cassiere@nku.edu
Ms. Beth Sweeney, director for administration
sweeneyb@nku.edu
Ms. Julie Budden, director of development
Ms. Amy M. Racke, advising specialist buddenj1@nku.edu rackea@nku.edu
Ms. Jennifer H. Webster, advising specialist websterj3@nku.edu
Mr. Josh Neumeyer, assistant to the dean neumeyerj1@nku.edu
Ms. Brenda Faulkner, secretary/receptionist faulkneb@nku.edu
Ms. Danielle Stegeman, administrative coordinator
stegemanda@nku.edu

## PROGRAMS OFFERED BY THE COLLEGE OF ARTS AND SCIENCES ASSOCIATE DEGREES <br> Associate of Arts - Integrative Studies <br> Criminal Justice

## BACHELOR DEGREES

Bachelor of Arts
Anthropology
Biological Sciences
Chemistry
Criminal Justice
English
French
Geography
Geology
German
History

## Bachelor of Science

Anthropology
Biological Sciences
Chemistry
Electronics Engineering Technology
Environmental Science Geology

Integrative Studies
International Studies

## Music

Organizational Leadership
Philosophy
Political Science
Psychology
Physics
Spanish
Theatre
Visual Arts

Manufacturing and Mechanical Engineering Technology
Mathematics
Physics
Political Science
Psychology
Sociology

Bachelor of Fine Arts
Dance
Theatre
Visual Arts

## Bachelor of Music

SECONDARY EDUCATION CERTIFICATION MAJORS

| Biological Sciences | French | Physics |
| :--- | :--- | :--- |
| Chemistry | German | Social Studies |
| Earth and Space Science | Mathematics | Spanish |
| English | Music | Visual Arts |

## MINORS

Afro-American Studies Anthropology
Applied Philosophy
Archaeology
Biological Sciences
Chemistry
Creative Writing
Criminal Justice
Criminalistics
Chinese Studies
Dance
Electronics Technology
English
Environmental Studies
French
Geography
Geology
German
Health Care Studie
History
International Studie
Japanese Studies
Latin American \&
Caribbean Studie
Mathematics
Medieval Studies
Military History
Music
Native American
Studies
Neuroscience
Philosophy

Physics Political Science
Pre-Law Psychology Public Administration Religious Studies Social Justice

Studies
Sociology
Spanish
Theatre
Visual Arts
Women's Studies
Workplace
Writing

## CERTIFICATES

Undergraduate
Civic Engagement
Family/Child Development
Freedom Studies
Global Citizenship
Manufacturing Processes
Organizational Leadership
Piano Pedagogy
Social Justice Studies
Studies in Creativity
Post Baccalaureate
Nonprofit Management

## GRADUATE PROGRAMS

(see graduate catalog for additional information)

## Masters

Master of Arts in Integrative Studies
Master of Science in Industrial-Organizational Psychology
Master of Public Administration

## Certificates

Certificate in Civic Engagement
Certificate in Industrial Psychology
Certificate in Occupational Health Psychology
Certificate in Organizational Psychology

## MISSION AND GOALS FOR THE COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences is comprised of thirteen academic departments offering instruction in fine arts; humanities; and behavioral, social, mathematical, and natural sciences. Its focus rests strongly on both disciplinary and interdisciplinary programs at both undergraduate and graduate levels. The faculty and staff are committed to a three-fold role in the University:

1. to provide all students with preparation for engaged citizenship through the University's general education program;
2. to serve the academic needs of students majoring and minoring in Arts and Sciences programs;
3. to collaborate and cooperate with colleagues across the University to provide significant educational experiences which enhance the intellectual and professional growth of students majoring in programs in the College of Business, College of Education and Human Services, College of Informatics, and the School of Nursing and Health Professions.

## ACCREDITATIONS

Accreditation Board for Engineering and Technology/Technology Accreditation Commission
American Chemical Society
National Association of Schools of Music
National Association of Schools of Public Affairs \& Administration

## COLLEGE-WIDE REQUIREMENTS

Each new student with a major in the College of Arts and Sciences must meet with an advisor. All students are encouraged to meet regularly with an advisor.

## COLLEGE-WIDE GRADUATION REQUIREMENTS

1. satisfactorily complete (GPA of at least 2.00) a minimum of 128 semester hours;

## Biological Sciences

Department

## FACULTY

Debra K. Pearce, chair
Charles A. Acosta, Hazel A. Barton, Bethany V. Bowling, Richard L. Boyce, Christine Curran, Gregory A. Dahlem, Debby S. Dempsey, Richard D. Durtsche, Rebecca L. Evans, Larry A. Giesmann, Jon M. Hastings, Miriam Steinitz Kannan, Bernard S. Lohr, Kristi H. Martines, Joseph Mester, Eimear M. Mullen, Patrick J. Schultheis, Michael P. Scola, E. David Thompson, Mary K. Whitson

## CONTACTING THE DEPARTMENT

The Department of Biological Sciences office is located in SC 204D and may be reached during business hours by phone at 859-572-5110. Visit the department's website at http://www.nku.edu/~biosci.

Debra Pearce, chair pearce@nku.edu

## BIOLOGICAL SCIENCES PROGRAMS Majors

A major in the biological sciences can lead to a variety of careers including research, medicine, dentistry, veterinary medicine, pharmacy, teaching, forensics, and many others. To facilitate preparation for these
2. satisfy the requirements of the University's 45 upper-division semester hours;
3. satisfy the requirements of the student's academic major;
4. satisfy the requirements of the student's academic minor or area of concentration with exceptions outlined in specific majors;
5. satisfy the University's general education requirements.

## COLLEGE OF ARTS AND SCIENCES ADVISING CENTER

FH 330
Staff
Ms. Janis Cassiere, Assistant Dean, Director of A\&S Advising Center
Ms. Amy Racke, Advising Specialist
Ms. Jennifer Webster, Advising Specialist
Ms. Aprile Conrad Redden, Retention Specialist
Ms. Candice van Loveren Gies, Retention Specialist
The College of Arts and Sciences offers instruction in fine arts, humanities, behavioral and social sciences, mathematics and natural sciences, and additional opportunities in interdisciplinary programs. The Arts and Sciences Advising Center enables students to explore these areas in depth. We are here to serve the student whose aptitudes and interests lie within these areas or disciplines, so that they may progress in a timely manner on their career path.

Many students are unsure of the path to take when selecting a major. Some students have many interests which can cause confusion as they begin their academic journey. This is a common problem. Students interested in more than one major or are unsure as to which direction to take should think about choosing as a "pre-major" Undeclared Arts and Sciences. Students who cannot or are not ready to declare in a selective admissions program in the College of Arts and Sciences should also declare Undeclared Arts and Sciences. The undeclared student begins on a broad path and is guided by our helpful staff to a more narrow focus. We will assist in course selection, discuss general education program requirements, transfer credit, personal time management, and varied program possibilities.
areas the department offers a degree in General Biology with several tracks. While completing a common core of courses that is taken by all majors, students may select from the following tracks:

General Biology Track (B.A. or B.S.)
Cellular/Molecular/Genetics Track (B.S.)
Ecology/Evolution/Organismal Track (B.S.)
Forensic Science Track (B.S.)
Teacher Education Track (B.A.)
Due to the interdisciplinary nature of this program a minor or area of concentration is not required by the University.

The department also administers an interdisciplinary degree program in Environmental Science (B.S.) For degree requirements please see catalog section under Interdisciplinary Programs.

## Minors

General Biology
Environmental Studies
The department provides advising in the following additional areas: pre-dentistry, pre-medicine, pre-veterinary medicine, pre-optometry, pre-pharmacy, pre-physical therapy, pre-physician assistant, pre-forestry, and pre-wildlife management. Since several of these preprofessional areas require a bachelors degree before acceptance into a professional degree program at another institution, all students are encouraged to pursue work in one of the tracks identified above.

## GENERAL EDUCATION COURSES OFFERED

BIO 120 General Biology
BIO 121, 121L Systems Biology
BIO 123 Human Ecology
BIO 125 Biological Perspective of Wellness
BIO 126 Human Nutrition
BIO 150, 150L Introduction to Biology I
BIO 151, 151L Introduction to Biology II
BIO 160 Plants and Human Cultures
BIO 208, 208L Human Anatomy and Physiology I
BIO 209, 209L Human Anatomy and Physiology II
BIO 235 Costa Rica Natural History

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS <br> Pre-Major

Freshman students who have been admitted to the University may declare as pre-majors in the Department of Biological Sciences by meeting either of the two following requirements.
(1) Students who come with ACT scores (or comparable SAT Scores) that enable them to enter the University without having to take a developmental course or courses and who have a math ACT greater than or equal to 20 may declare as pre-biology majors. A student with one or more identified deficiencies on the ACT may also qualify for pre-biology status after passing the appropriate placement exam(s).
(2) Students may qualify for acceptance as a pre-biology major after they complete (with a minimum grade of $C$ ) any developmental or math courses required as a result of low ACT scores.
Once a student has been accepted as a pre-major in the department, he or she will be assigned a departmental advisor. Prior to that time, she or he will be advised by an academic advisor in the College of Arts and Sciences Advising Center.

A student who has been accepted as a pre-major in the Department of Biological Sciences may enroll in courses in introductory biology (BIO 150 and 151) and general chemistry (CHE 120 and 121). Once these courses, along with a course in mathematics (MAT 112, 129 or STA 205), have been completed with a grade of $C$ or higher, a student may be admitted as a biology major. Unless special permission is given by the course instructor and approved by the chair, a pre-biology major who has not been admitted as a biology major will not be allowed to enroll in 200level or higher level biology courses (with the exception of BIO 202, 208, 209, 313, 235 and 272).

The plan stated above applies to those students pursuing degrees in biology (all tracks), environmental science, and to those interested in any of the pre-professional areas offered by the department. Since the core curriculum for all of these programs is essentially the same, the requirements for admission stated above apply to all programs in the department.

## Transfer Students

Transfer students who enter NKU with completed coursework in biology, chemistry, and mathematics (minimum grade of $C$ required) that is evaluated as equivalent to that mentioned above may apply for admission as a biology major. Students without equivalent courses in biology, chemistry, and mathematics and with no admission deficiencies may apply for admission as a pre-biology major. Ideally, this determination will be made prior to a student's first semester of enrollment. If this is not accomplished in a timely manner, the student will be admitted as a premajor in biology until an evaluation of transfer work can be completed. This assumes that the transfer student has completed any necessary developmental work as discussed above.

Transfer students obtaining a major in biological sciences must complete 20 of the required semester hours in biological sciences at NKU. Transfer students who have completed a year of major-level college prior to arrival at NKU are encouraged to enroll in BIO 155 Orientation to Biology at their earliest opportunity. This is a 1 -semester-hour course
designed to provide an orientation to the discipline of biology as well as to the department and its faculty.

## DEPARTMENT POLICIES

Students must obtain approval of their curricula in consultation with an adviser in the department.

Six semester hours of cooperative education credit may be applied toward requirements for the major in biological sciences. Applicability of cooperative education credit to fulfill area requirements in one of the course groups will be determined on an individual basis. Arrangements to use cooperative education credit for the major must be made among the student, the student's adviser, and the cooperative education coordinator in biological sciences prior to registration for such credit.

The degree of Bachelor of Science or Bachelor of Arts major in biological sciences, with emphasis in a specific track, is conferred upon students completing: (a) core requirements for a major in biological sciences, (b) core support courses, (c) requirements of the chosen track, (d) a minor or area of concentration is not required for a degree in biological sciences, and (e) other NKU requirements for the degree.

All biology majors are required to take a sequence of two courses in the same foreign language.

## Undergraduate Research

The best way for students to learn about science is by doing science. Therefore, the department strongly encourages all students majoring in biology to participate in research with a faculty member. To prepare for this, students should complete BIO 255 (Biological Literature and Research) as soon as possible following the completion of BIO 150151 This course helps students develop the skills they will need to effectively research the literature available on a topic. Upon completion of BIO 255, students are encouraged to enroll in BIO 399 (Techniques of the Biological Sciences). Working with a faculty member in BIO 399, students will learn techniques they can use in BIO 492 Directed Research. In some instances, students may bypass BIO 399 and go directly to BIO 492.

## Assessment Testing

Prior to graduation, all students majoring in biology are required to pass a comprehensive exam. This examination is designed to verify that the graduating student has at least a basic knowledge of the broad area of the biological sciences. This requirement applies to biology majors in all tracks but does not include those majoring in environmental science. Students will complete this requirement by registering for BIO 491 Comprehensive Examination during the senior year. Those who fail the exam will not be allowed to graduate until the exam is passed.

## FACULTY'S PRIMARY OBJECTIVES

1. To help students develop exact, critical, and independent thought.
2. To increase students' perception, understanding, and appreciation of themselves and of their environment.
3. To create student awareness of and interest in the role of the biological sciences in meeting societal and economic needs.
4. To emphasize to students the importance of interdisciplinary science experiences and proficiency.
5. To provide for students the biological sciences background necessary for entrance into a career or into graduate and professional schools.
6. To make fully available to residents of northern Kentucky and greater Cincinnati the resources of the faculty.
7. To maintain excellence of the faculty through continuing professional activity.

## BACHELOR'S DEGREE PROGRAMS

## General Biology

Students pursuing a degree in the biological sciences may do so by choosing one of six different tracks. These tracks allow the individual student to place an emphasis on areas of biology that he or she finds of interest. However, the faculty of the department feels very strongly that each student completing a degree in biology must have a solid foundation in the discipline. Therefore, we have selected a core of courses that is required of all majors. A grade of $C$ or better must be earned in all biology courses that count toward completion of major requirements. We have also identified a common core of support courses that must be completed with a $C$ or better by all biology majors. Details concerning the biology core, support core, and each of the tracks are posted below.

The curriculum plans presented here are designed to give students a strong background in the biological sciences preparatory to a biologically oriented career or graduate work. While we don't offer specific degree programs for students with interest in botany, aquatic biology, microbiology, medical technology, zoology, or other facets of biology, such interest can be met by taking, "elective" courses in these disciplines. Details of such emphases should be worked out in consultation with an advisor. A semester by semester curriculum plan may be obtained from the department office or your advisor.

## Core Requirements - All Tracks

| Biology Core: |  |
| :--- | ---: |
| BIO 150-150L Introduction to Biology I with Lab | 4 |
| BIO 151-151L Introduction to Biology II with Lab | 4 |
| BIO 155 Orientation to Biology | 1 |
| BIO 348 General/Cell/Molecular Biology I | 3 |
| BIO 349, 349L General/Cell/Molecular Biology II | 4 |
| BIO 291W Biological Literature and Research | 3 |
| BIO 304 General Ecology | 3 |
| BIO 491 Comprehensive Examination | 0 |
| Total Biology Core Credit Hours | $\mathbf{2 2}$ |


| Support Core: |  |
| :--- | ---: |
| CHE 120-120L, 121-121L General Chemistry I and II | 8 |
| PHY 211 and 213 General Physics I \& II with labs (MAT 119 is a <br> prerequisite) |  |
| or | 10 |
| PHY 220 and 222 University Physics I \& II with labs | 3 |
| STA 205 Introduction to Statistical Methods | $\mathbf{2 1}$ |
| Total Support Core Credit Hours | Foreign Language Requirement: It is important to note that all biol- <br> ogy majors are required to take a two-course sequence in a foreign lan- <br> guage. These courses may be used to satisfy the humanities general <br> education requirements. |

## Information concerning each of the tracks follows.

## BACHELOR'S DEGREE PROGRAMS

## Bachelor of Arts, General Biology Track

Not recommended for those who wish to pursue a post-graduate education in the sciences.

| Biology Core: see requirements presented earlier | 22 |
| :--- | ---: |
|  |  |
| Additional Biology Courses |  |
| BIO 304L Ecology Laboratory | 1 |
| BIO 358 Evolution of Organism | 3 |


| One course from Cellular/Molecular/Genetics Group* | $3-4$ |
| :--- | ---: |
| One course from Ecology/Evolution/Organismal Group* | $3-4$ |
| One course from Field Biology Group* | $3-4$ |
| BIO 410 Conservation Biology | 3 |
| Biology Elective | 4 |
| Total Biology Credit Hours | $\mathbf{4 2 - 4 5}$ |
|  |  |
| Support Core: see requirements presented earlier | $\mathbf{2 1}$ |
|  |  |
| Additional Support Courses |  |
| CHE 310 and CHE 310L Organic Chemistry I | 4 |
| Total Required Credit Hours | $\mathbf{6 7 - 7 0}$ |

*See list of courses that follow. Although a course may be included in more than one list, no single course may be used to satisfy more than one group requirement.

## A suggested semester by semester plan for the B.A. General Biology Track follows:

| Freshman Year Courses | $1{ }^{\text {st }}$ Semester | $2^{\text {nd }}$ Semester |
| :---: | :---: | :---: |
| BIO 150-150L Introduction to Biology I | 4 |  |
| BIO 151-151L Introduction to Biology II |  | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120-120L General Chemistry I | 4 |  |
| CHE 121-121L General Chemistry II |  | 4 |
| ENG 101 College Writing | 3 |  |
| Foreign Language | 3-4 | 3-4 |
| STA 205 Introduction to Statistical Methods | 3 |  |
| CST 101 Principles of Speech Communication |  | 3 |
| Total | 17-18 | 15-16 |


| Sophomore Year Courses | 1 $^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 348 Genetics/Cellular/Molecular <br> Biology I | 3 |  |
| BIO 349-349L Genetics/Cellular/ <br> Molecular Biology II |  | 4 |
| BIO 291W Biological Literature and <br> Research |  | 3 |
|  |  |  |
| CHE 310-310L Organic Chemistry I | 4 |  |
| PHY 211 General Physics I | 5 |  |
| PHY 213 General Physics II |  | 5 |
| General Education | 3 | 3 |
| Total | $\mathbf{1 5}$ | $\mathbf{1 5}$ |


| Junior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | $2^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 304 General Ecology | 3 |  |
| BIO 304 L Ecology Laboratory | 1 |  |
|  |  |  |
| BIO 358 Evolution of Organisms | $3-4$ | 3 |
| Course from Cellular/Molecular/ <br> Genetics Group | 6 | $3-4$ |
| Course from Ecology/Evolution/ <br> Organismal Group | 3 | 6 |
| Elective | $\mathbf{1 6 - 1 7}$ | $\mathbf{1 5 - 1 6}$ |
| General Education |  |  |
| Total |  |  |


| Senior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | $\mathbf{2}^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 410 Conservation Biology |  | 3 |
| BIO 491 Comprehensive Examination |  | 0 |
| Biology Elective | 4 | 4 |
| Course from Field Biology Group |  | $3-4$ |
| Elective | 9 | $3-4$ |
| General Education | 3 | 3 |
| Total | $\mathbf{1 6}$ | $\mathbf{1 6 - 1 8}$ |

## Bachelor of Science, General Biology Track

| Biology Core: see requirements presented earlier | 22 |
| :---: | :---: |
| Additional Biology Courses |  |
| BIO 304L Ecology Lab | 1 |
| BIO 358 Evolution of Organism | 3 |
| One course from Cellular/Molecular/Genetics Group* | 3-4 |
| One course from Ecology/Evolution/Organismal Group* | 3-4 |
| One course from Field Biology Group* | 3-4 |
| Biology Elective | 4 |
| Total Biology Credit Hours | 39-42 |
| Support Core: see requirements presented earlier | 21 |
| Additional Support Courses |  |
| CHE 310 and CHE 310L Organic Chemistry I and |  |
| CHE 311/311L Organic Chemistry II | 8 |
| (with special permission of the Department Chair prior to taking CHE 310, other advanced CHE, GLY, PHY courses with lab may be substituted for CHE 311) see page 53. |  |
| MAT 112 Applied Calculus or MAT 129 Calculus I | 3-4 |
| Total Support Course Credit Hours | 32-35 |
| Total Required Credit Hours | 71-75 |
| *See list of courses that follow. Although a course may be included in more than one list, no single course may be used to satisfy more than one group requirement. |  |

A suggested semester by semester plan for the B.S. General Biology Track follows:

| Freshman Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 150-150L Introduction to Biology <br> I | 4 |  |
| BIO 151-151L Introduction to Biology <br> II |  | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120-120L General Chemistry I | 4 | 4 |
| CHE 121-121L General Chemistry II |  | 3 |
| ENG 101 College Writing <br> Foreign Language* <br> (If starting with 101 level course, the <br> foreign language requirement can be <br> delayed to a later semester) | $3-4$ | $3-4$ |
| MAT 112 Applied Calculus or MAT <br> 129 Calculus I | $3-4$ |  |
| CMST101 Principles of Speech Com- <br> munications | $\mathbf{1 7 - 1 9}$ | $\mathbf{1 5 - 1 6}$ |
| Total |  |  |


| Sophomore Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 348 Genetics/Cellular/Molecular <br> Biology I | 3 |  |
| BIO 349-349L Genetics/Cellular/ <br> Molecular Biology II |  | 4 |
| BIO 291W Biological Literature and <br> Research | 3 |  |
|  |  |  |
| CHE 310-310L Organic Chemistry I | 4 |  |
| CHE 311-311L Organic Chemistry II | 3 | 4 |
| STA 205 Introduction to Statistical <br> Methods | 3 |  |
| General Education | $\mathbf{1 6}$ | $\mathbf{1 4}$ |
| Total |  |  |


| Junior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | $\mathbf{2}^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 304-General Ecology | 3 |  |
| BIO 304 Ecology Lab | 1 |  |
| BIO 358 Evolution of Organisms | $3-4$ | 3 |
| Course from Cellular/Molecular/ <br> Genetics Group |  | $3-4$ |
| Course from Ecology/Evolution/ <br> Organismal Group | 5 |  |
| PHY 211 General Physics I |  | 5 |
| PHY 213 General Physics II | $\mathbf{1 5 - 1 6}$ | $\mathbf{1 7 - 1 8}$ |
| General Education |  |  |
| Total |  | 6 |


| Senior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | $\mathbf{2}^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 491 Comprehensive Examination |  | 0 |
| Biology Elective | 4 |  |
| Course from Field Biology Group |  | $3-4$ |
| Elective | 9 | 12 |
| General Education | 3 |  |
| Total | $\mathbf{1 6}$ | $\mathbf{1 5 - 1 6}$ |
|  |  |  |

## Bachelor of Science, Cellular/Molecular/Genetics Track

| Biology Core: see requirements presented earlier | 22 |
| :--- | ---: |
|  |  |
| Additional Biology Courses | 3 |
| BIO 342 Biometry | 4 |
| BIO 302/302L General Microbiology | 4 |
| BIO 400/400L Advanced Molecular Biology/Genetics <br> or <br> BIO 360 Advanced Cell Biology | 3 |
| Two courses from Cellular/Molecular/Genetics Group* | $6-8$ |
|  | $\mathbf{3 8 - 4 1}$ |
| Total Biology Credit Hours |  |
|  | $\mathbf{2 1}$ |
| Support Core: see requirements presented earlier |  |
| Additional Support Courses | 8 |
| CHE 310/310L Organic Chemistry I and <br> CHE 311/311L Organic Chemistry II | $3-4$ |
| MAT 112 Applied Calculus or <br> MAT 129 Calculus I |  |


| CHE (BIO) 482 Biochemistry I | 3 |
| :--- | ---: |
| CHE (BIO) 483 Biochemistry II | 3 |
| Total Support Course Credit Hours | $\mathbf{3 8 - 3 9}$ |
| Total Required Credit Hours | $\mathbf{7 6 - 7 9}$ |
| *See list of courses that follow. Although a course may be included in |  |
| more than one list, no single course may be used to satisfy more than |  |
| one group requirement. |  |

A suggested semester by semester plan for the Cellular/

## Molecular/Genetics Track follows:

| Freshman Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 150-150L Introduction to Biology I | 4 |  |
| BIO 151-151L Introduction to Biology <br> II |  | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120-120L General Chemistry I | 4 | 4 |
| CHE 121-121L General Chemistry II |  | 4 |
| ENG 101 College Writing | $3-4$ | $3-4$ |
| Foreign Language* <br> (If starting with 101-level course, the <br> foreign language requirement can be <br> delayed to a later semester) |  |  |
| MAT 112 Applied Calculus or MAT <br> 129 Calculus I | $3-4$ |  |
| CMST 101 Principles of Speech Comm | $\mathbf{1 7 - 1 9}$ | $\mathbf{1 5 - 1 6}$ |
| Total |  |  |


| Sophomore Year Courses | 1 $^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 342 Biometry |  | 3 |
| BIO 348 Genetics/Cellular/Molecular <br> Biology I | 3 |  |
| BIO 349-349L Genetics/Cellular/ <br> Molecular Biology II |  | 4 |
| BIO 291W Biological Literature and <br> Research | 3 |  |
|  |  |  |
| CHE 310-310L Organic Chemistry I | 4 |  |
| CHE 311-311L Organic Chemistry II |  | 4 |
| General Education | 3 | 3 |
| STA 205 Intro to Statistical Methods | 3 |  |
| Total | $\mathbf{1 6}$ | $\mathbf{1 4}$ |


| Junior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | $\mathbf{2}^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 302-302L General Microbiology |  | 4 |
| BIO 304 General Ecology | 3 |  |
| Course from Cellular/Molecular/ <br> Genetics Group | $3-4$ |  |
| CHE (BIO) 482 Biochemistry I | 3 |  |
| CHE (BIO) 483 Biochemistry II |  | 3 |
| PHY 211 General Physics I | 5 |  |
| PHY 213 General Physics II |  | 5 |
| General Education |  | 3 |
| Total | $\mathbf{1 4 - 1 5}$ | $\mathbf{1 5}$ |


| Senior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | $2^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 360 Advanced Cell Biology or <br> BIO 400-400L Advanced Molecular <br> Biology/Genetics |  | $3-4$ |
| BIO 491 Comprehensive Examination |  |  |


| Course from Cellular/Molecular <br> Genetics Group | $3-4$ |  |
| :--- | :---: | :---: |
| Elective | 9 | 6 |
| General Education | 3 | 6 |
| Total | $\mathbf{1 5 - 1 6}$ | $\mathbf{1 5 - 1 6}$ |

## Bachelor of Science, Ecology/Evolution/Organismal Track

| Biology Core: see requirements presented earlier | 22 |
| :--- | ---: |
|  |  |
| Additional Biology Courses | 3 |
| BIO 342 Biometry | 3 |
| BIO 358 Evolution of Organisms | 1 |
| BIO 304L Ecology Lab | $3-4$ |
| One course from Ecology Group* | $6-9$ |
| Two courses from Organismal Group* | $3-4$ |
| One course from Field Group* | $\mathbf{4 1 - 4 6}$ |
| Total Biology Credit Hours | $\mathbf{2 1}$ |
|  | 8 |
| Support Core: see requirements presented earlier | 8 |
|  |  |
| Additional Support Courses | 8 |
| CHE 310/310L Organic Chemistry I <br> and CHE 311/311L Organic Chemistry II <br> (With special permission of the Department Chair prior <br> to taking CHE 310, other advanced CHE, GLY, PHY <br> courses with lab may be substituted for CHE 311) see <br> page 52. | 3-4 <br> MAT 112 Applied Calculus or MAT 129 Calculus I <br> Total Support Course Credit Hours <br> Total Required Credit Hours <br> See |

*See list of courses that follow. Although a course may be included in more than one list, no single course may be used to satisfy more than one group requirement.

A suggested semester by semester plan for the Ecology/ Evolution/Organismal Track follows:

| Freshman Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 150-150L Introduction to Biology I | 4 |  |
| BIO 151-151L Introduction to Biology II |  | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120-120L General Chemistry I | 4 |  |
| CHE 121-121L General Chemistry II | 3 | 4 |
| ENG 101 College Writing | $3-4$ | $3-4$ |
| Foreign Language* <br> (If starting with 101-level course, the <br> foreign language requirement can be <br> delayed to a later semester) |  | $3-4$ |
| MAT 112 Applied Calculus or MAT 129 <br> Calculus I |  |  |
| CMST 101 Principles of Speech Com- <br> munication | 3 | $\mathbf{1 5 - 1 9}$ |
| Total |  |  |


| Sophomore Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| STA 205 Intro to Statistical Methods | 3 |  |
| BIO 342 Biometry |  | 3 |

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| BIO 348 Genetics/Cellular/Molecular <br> Biology I | 3 |  |
| :--- | :---: | :---: |
| BIO 349-349L Genetics/Cellular/ <br> Molecular Biology II |  | 4 |
| BIO 291W Biological Literature and <br> Research | 3 |  |
|  |  | 4 |
| CHE 310-310L Organic Chemistry I | 4 |  |
| CHE 311-311L Organic Chemistry II |  | 3 |
| General Education | $\mathbf{3}$ | $\mathbf{1 4}$ |
| Total | $\mathbf{1 6}$ |  |


| Junior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | $\mathbf{2}^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 304 General Ecology | 3 |  |
| BIO 304L Ecology Lab | 1 |  |
| BIO 358 Evolution of Organisms |  | 3 |
| Course from Ecology Group | $3-4$ |  |
| Course from Organismal Group |  | $3-5$ |
| PHY 211 General Physics I | 5 |  |
| PHY 213 General Physics II |  | 5 |
| General Education | 3 | 3 |
| Total | $\mathbf{1 5 - 1 6}$ | $\mathbf{1 4 - 1 6}$ |


|  |  |  |
| :--- | :---: | :---: |
| Senior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | $\mathbf{2}^{\text {nd }}$ Semester |
| BIO 491 Comprehensive Examination |  | 0 |
| Course from Field Group |  | $3-4$ |
| Course from Organismal Group | $4-5$ |  |
| Elective | 8 | 10 |
| General Education | 3 | 3 |
| Total | $\mathbf{1 5 - 1 6}$ | $\mathbf{1 6 - 1 7}$ |
|  |  |  |

## Bachelor of Arts, Biology Teacher Education Track

The teacher education program in biology is designed to give future biology teachers a broad overview of the biological sciences. This has been assured by the wide range of biological science courses required by the program. The additional requirement of related courses such as chemistry and physics will provide students with the background necessary for teaching in these areas, if the need should arise.

The program below meets all requirements of the State Department of Education and NKU for certification in biology. Because of the need to meet both professional and general education requirements, there is little flexibility in this program.

Transfer students pursuing a degree in teacher education in biology must meet the minimum transfer requirements stated earlier in this section. Students with a degree in another discipline who wish to become biology teachers may do so by completing only certification requirements.

Students pursuing a biology/secondary education curriculum should review that portion of this catalog relating to secondary education. Upon deciding to pursue the teacher education program, students must meet with the coordinator of certification and advisement in the College of Education and Human Services. Each student will also be assigned an adviser from the Department of Biological Sciences who will work closely with him or her to make sure all requirements are met in a timely manner and in the proper sequence.

[^1]| Additional Biology Courses |  |
| :--- | ---: |
| BIO 358 Evolution of Organisms | 3 |
| BIO 304L Ecology Lab | 1 |
| One plant course with a lab | $3-4$ |
| One animal course with a lab | 4 |
| BIO 425/425L Mammalian Anatomy \& Physiology I | 4 |
| Total Biology Credit Hours | $\mathbf{3 7 - 3 8}$ |
|  | $\mathbf{2 1}$ |
| Support Core: see requirements presented earlier |  |
|  | $\mathbf{3 9}$ |
| Education Courses |  |
| EDU \& EDS Education Courses (see College of |  |
| Education) | 3 |
| Related courses specified by College of Education (12 |  |
| credits satisfy General Education Requirements) | 3 |
| Course in Philosophy (PHI) | 3 |
| Course in Fine Arts (ART, MUS, TAR) | 3 |
| ENG 101 College Writing | 3 |
| BIO 291W Biological Literature and Research | 3 |
| CMST 101 Principles of Speech | 2 |
| PSY 100 Introduction to Psychology | 1 |
| PHE 200 Concepts of Lifetime Fitness | $\mathbf{2 1}$ |
| PHE XXX (activity course) |  |
| Total Credit Hours Related Courses |  |

A suggested semester by semester plan for the Biology Teacher Education Track follows:

| Freshman Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 150-150L Introduction to Biology I | 4 |  |
| BIO 151-151L Introduction to Biology <br> II |  | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120-120L General Chemistry I | 4 |  |
| CHE 121-121L General Chemistry II | 3 | 4 |
| ENG 101 College Writing | $3-4$ | $3-4$ |
| Foreign Language* (If starting with <br> 101-level course, the foreign language <br> requirement can be delayed to a later <br> semester) | 3 |  |
| STA 205 Introduction to Statistical <br> Methods | $\mathbf{1 7 - 1 8}$ | $\mathbf{1 5 - 1 6}$ |
| CMST 101 Principles of Speech <br> Communication |  |  |
| Total |  |  |


| First Summer Courses | $\mathbf{1}^{\text {st }} \mathbf{5}$ Weeks | $\mathbf{2}^{\text {nd }} \mathbf{5}$ Weeks |
| :--- | :---: | :---: |
| General Education | 6 | 3 |
| Total | $\mathbf{6}$ | $\mathbf{3}$ |


| Sophomore Year Courses | 1 $^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 348 Genetics/Cellular/Molecular <br> Biology I | 3 |  |
| BIO 349-349L Genetics/Cellular/Molec- <br> ular Biology II |  | 4 |
| BIO 291W Biological Literature and <br> Research | 3 |  |
| One Plant Course with Lab |  | $3-4$ |
| One Animal Course with Lab |  | 4 |


|  |  |  |
| :--- | :---: | :---: |
| PHE 200 Concepts of Lifetime Fitness | 2 |  |
| One Physical Education Activity (PHE) | 1 |  |
| PSY 100 Introduction to Psychology | 3 |  |
| Course in Philosophy (PHI) | 3 |  |
| Course in Fine Arts (ART, MUS, TAR) |  | 3 |
| Total | $\mathbf{1 5}$ | $\mathbf{1 4 - 1 5}$ |


| Junior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 304 General Ecology | 3 |  |
| BIO 304 General Ecology Lab | 1 |  |
| BIO 358 Evolution of Organisms |  | 3 |
| EDS 322 Planning \& Implementing <br> Instruction for Students with Exception- <br> ality |  | 2 |
| EDS 360 Students with Exceptionality in <br> the Schools | 2 |  |
| EDU 300 Human Growth and Develop- <br> ment | 3 |  |
| EDU 305 Introduction to Education | 2 |  |
| EDU 311 Admissions Practicum for Sec- <br> ondary Grades | 2 |  |
| EDU 313 Computer Applications for <br> Teachers | 1 |  |
| EDU 318 Classroom Management |  | 1 |
| EDU 324 Fundamentals of Secondary <br> Education |  | 2 |
| EDU 393 Secondary Practicum I | $\mathbf{1 9}$ | $\mathbf{1 8}$ |
| PHY 211 General Physics I |  |  |
| PHY 213 General Physics II |  | 5 |
| General Education |  |  |
| Total |  |  |


| Senior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
|  <br> Physiology I | 4 |  |
| BIO 491 Comprehensive Exam |  | 0 |
| EDU 315 Educational Assessment | 2 |  |
| EDU 330 Teaching Science in the Sec- <br> ondary School | 3 |  |
| EDU 396 Secondary Practicum II | 2 |  |
| EDU 496 Student Teaching in Secondary <br> School |  | 12 |
| General Education | 6 |  |
| Total | $\mathbf{1 7}$ | $\mathbf{1 2}$ |
|  |  |  |

## Bachelor of Science, Forensic Science Track

This track is designed to provide students who wish to pursue a career in forensic science with a solid background in the sciences while giving them the basic knowledge that they will need in order to succeed in the criminal justice system. We strongly recommend that majors in this track complete the minor in criminalistics offered by the Department of Political Science. By doing so they will be much better prepared to work with other law enforcement professionals. This degree track is designed to insure that graduates who later decide to pursue some other area of work in the biological sciences or to go to graduate school can do so with little if any additional course work. Due to the complexity of this program, it is critical that students work closely with their assigned adviser from the very beginning.

| Biology Core: see requirements presented earlier | 22 |
| :--- | ---: |
|  |  |
| Additional Biology Courses | 3 |
| BIO 342 Biometry | 4 |
| BIO 302/302L General Microbiology | 4 |
| BIO 320/320L Entomology | 4 |
| BIO 400-400L Advanced Molecular Biology/Genetics | $\mathbf{3 7}$ |
| Total Biology Credit Hours |  |
|  | $\mathbf{3 - 4}$ |
| Elective Courses |  |
| BIO 455 Scanning Electron Microscopy or |  |
| CHE 350/350L Instrumental Analysis | $\mathbf{2 1}$ |
|  | 8 |
| Support Core: see requirements presented earlier | 4 |
|  | 4 |
| Additional Support Courses | 4 |
|  |  |
| II | 3 |
| CHE 340/340L Analytical Chemistry | 3 |
| CHE 482/482L Biochemistry I | 4 |
| JUS 101 Introduction to Criminal Justice* | $\mathbf{4 8}$ |
| JUS 204 Criminal Investigation | $\mathbf{8 9 - 9 1}$ |
| MAT 129 Calculus I |  |
| Total Support Course Credit Hours |  |
| Total Required Credit Hours |  |
| This |  |

* This course may be used to satisfy General Education requirement in Social Sciences


## A suggested semester by semester plan for the Forensic Science Track follows:

| Freshman Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 150-150L Introduction to Biology I | 4 |  |
| BIO 151-151L Introduction to Biology <br> II |  | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120-120L General Chemistry I | 4 |  |
| CHE 121-121L General Chemistry II | 3 | 4 |
| ENG 101 College Writing | $3-4$ | $3-4$ |
| Foreign Language* (If starting with <br> 101-level course, the foreign language <br> requirement can be delayed to a later <br> semester) | 3 |  |
| STA 205 Introduction to Statistical <br> Methods | $\mathbf{1 7 - 1 8}$ | $\mathbf{1 5 - 1 6}$ |
| CMST 101 Principles of Speech Com- <br> munication |  | 3 |
| Total |  |  |


| Sophomore Year Courses | $1^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 342 Biometry | 3 |  |
| BIO 348 Genetics/Cellular/Molecular <br> Biology I | 3 |  |
| BIO 349-349L Genetics/Cellular/ <br> Molecular Biology II | 3 | 4 |
| BIO 291W Biological Literature and <br> Research | 3 |  |

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| Elective |  | 4 |
| :--- | :---: | :---: |
| CHE 310-310L Organic Chemistry I | 4 |  |
| CHE 311-311L Organic Chemistry II |  | 4 |
| MAT 129 Calculus I |  | 4 |
| General Education | 3 |  |
| Total | $\mathbf{1 6}$ | $\mathbf{1 6}$ |


| Junior Year Courses | 1 $^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 302-302L General Microbiology |  | 4 |
| BIO 304 General Ecology | 3 |  |
| CHE 340-340L Analytical Chemistry | 4 |  |
| JUS 101 Introduction to Criminal Jus- <br> tice |  | 3 |
| PHY 211 General Physics I | 5 |  |
| PHY 213 General Physics II |  | 5 |
| General Education | 3 | 3 |
| Total | $\mathbf{1 5}$ | $\mathbf{1 5}$ |


| Senior Year Courses | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| BIO 320 Entomology | 4 |  |
| BIO 400-400L Advanced Molecular <br> Biology/Genetics |  | 4 |
| BIO 455 Scanning Electron Microscopy <br> or <br> CHE 350-350L Instrumental Analysis |  | $3-4$ |
| BIO 491 Comprehensive Examination |  | 0 |
| CHE (BIO) 482-482L Biochemistry I | 4 |  |
| JUS 204 Criminal Investigation | 3 |  |
| Elective |  | 6 |
| General Education | 3 |  |
| Total | $\mathbf{1 4}$ | $\mathbf{1 3 - 1 4}$ |
|  |  |  |

Possible course substitutions for CHE 311 that may be applied to the B.S. General Biology Track and the B.S. Ecology/Evolution/Organismal Track are as follow:

CHE 340-340L Analytical Chemistry
CHE 440 Environmental Chemistry
GLY 302-302L Historical Geology
GLY 315-315L Structural Geology
GLY 330 Geomorphology
GLY 402-402L Invertebrate Paleontology
PHY 304-304L Electronics and Circuit Analysis
PHY 315 Introduction to Astrophysics

## Course Groups

Cell/Molecular/Genetics Group
BIO 245 Neurobiology
BIO 302 General Microbiology
BIO 360 Advanced Cell Biology
BIO 381 Human Nutrition and Metabolism
BIO 400 Advanced Molecular Biology/Genetics
BIO 402 Advanced Neurobiology
BIO 426 Mammalian Anatomy \& Physiology II
BIO 430 Immunology
BIO 446 Plant Physiology
BIO 467 Endocrinology
BIO 470 Medical Microbiology
BIO 474 Virology

## Ecology/Evolution/Organismal Group

BIO 211 General Botany

BIO 300 Comparative Vertebrate Anatomy
BIO 301 Invertebrate Zoology
BIO 303 Vertebrate Zoology
BIO 305 Vertebrate Embryology
BIO 308 Plant Systematics
BIO 309 Plant Ecology
BIO 310 Plant Morphology
BIO 311 Mycology
BIO 320 Entomology
BIO 404 Herpetology
BIO 405 Invertebrate Paleontology
BIO 407 Ornithology
BIO 409 Biogeography
BIO 410 Conservation Biology
BIO 421 Mammalogy
BIO 422 Limnology
BIO 425 Mammalian Anatomy \& Physiology I
BIO 426 Mammalian Anatomy \& Physiology II
BIO 440 Animal Behavior
BIO 441 Animal Physiological Ecology
BIO 445 Anatomy of Vascular Plants
BIO 446 Plant Physiology
BIO 460 Introduction to Marine Science
BIO 465 Regional Biology
BIO 474 Microbial Ecology
ENG 350 Environmental Toxicology

## Organismal Group

BIO 313 General Botany
BIO 300 Comparative Vertebrate Anatomy
BIO 301 Invertebrate Zoology
BIO 303 Vertebrate Zoology
BIO 305 Vertebrate Embryology
BIO 308 Plant Systematics
BIO 309 Plant Ecology
BIO 310 Plant Morphology
BIO 311 Mycology
BIO 320 Entomology
BIO 404 Herpetology
BIO 407 Ornithology
BIO 421 Mammalogy
BIO 425 Mammalian Anatomy \& Physiology I
BIO 426 Mammalian Anatomy \& Physiology II
BIO 440 Animal Behavior
BIO 441 Animal Physiological Ecology
BIO 445 Anatomy of Vascular Plants

## Field Group

BIO 309 Plant Ecology
BIO 312 Dendrology
BIO 320 Entomology
BIO 330 Field Biology
BIO 404 Herpetology
BIO 405 Invertebrate Paleontology
BIO 407 Ornithology
BIO 421 Mammalogy
BIO 422 Limnology
BIO 460 Introduction to Marine Science
BIO 461 Ecology and Geology of Coral Reefs
BIO 463 Tropical Ecology Lab
BIO 465 Regional Biology
ENV 380 Field Methods in Environmental Science

## Ecology Group

BIO 304 General Ecology
BIO 309 Plant Ecology

BIO 409 Biogeography
BIO 410 Conservation Biology
BIO 422 Limnology
BIO 441 Animal Physiological Ecology
BIO 460 Introduction to Marine Science
BIO 461 Ecology and Geology of Coral Reefs
BIO 462 Tropical Ecology
BIO 465 Regional Biology
BIO 474 Microbial Ecology
ENV 350 Environmental Toxicology

## Environmental Science

The Bachelor of Science in Environmental Science is an interdisciplinary degree offered in collaboration with the Department of Chemistry and the Department of Physics and Geology. It is designed to provide students breadth in the scientific disciplines associated with environmental issues. For program details, please see "Interdisciplinary Studies," "Bachelor of Science in Environmental Science" on page 97 of this catalog.

## The Minor in Biological Sciences

Requirements for a minor in biological sciences are as follows:
A. At least 21-22 semester hours in biological sciences (minimum acceptable grade: $C$ ), including:
BIO 150/150L Introduction to Biology I with Lab
BIO 151/151L Introduction to Biology II with Lab
BIO 348 General/Cell/Molecular Biology I
BIO 349/349L General/Cell/Molecular Biology II
BIO 358 Evolution Organisms
One additional course ( 300 -level or above) chosen from the organismal, field, or ecology groups for a total of 21-22 credit hours.
B. At least two semesters of college chemistry (CHE 120 \& 121) and one semester of college mathematics (MAT 112 or above).

## Environmental Studies Minor

For program details, see page 101 under "Interdisciplinary Studies" of this catalog.

## PRE-PROFESSIONAL CURRICULA

## Pre-Dentistry and Pre-Medicine

In preparation for admission to dental or medical schools, it is advisable to obtain a broad background in natural sciences, social sciences, and humanities. Students should consult bulletins from schools of their choice for specific entrance requirements.

Dental and medical schools give preference to applicants with the bachelor's degree. In exceptional cases, however, such schools may accept students after completion of the junior year. Under certain conditions, credit earned during the first year at dental or medical school may be accepted by NKU to fulfill its requirements for the fourth year of undergraduate studies leading to the bachelor's degree. Students considering such a three-year program at NKU should, in consultation with an adviser, plan curricula that satisfy the requirements set forth under "POLICY ON TRANSFER OF UNDERGRADUATE CREDIT" on page 34 of this catalog.

Since most students will complete a degree in general biology enroute to the completion of requirements for acceptance into medical or dental school, the previously mentioned requirements for a bachelor of science, cellular/molecular/genetics track should be followed.

In their junior year, pre-med students must register with NKU's Pre-Medical Review Board to indicate intended application to medical or dental school. Information on the Board may be obtained from students’ advisers.

## Pre-Veterinary Medicine

Although Kentucky does not have a school of veterinary medicine, a limited number of Kentucky residents are selected to enter training in
veterinary medicine at Auburn University (Auburn, Alabama) and Tuskegee Institute (Tuskegee, Alabama). These students are exempt from out-of-state tuition.

Most students require at least three years to complete the courses required for admission to veterinary schools. Such a three-year curriculum is presented below. Under certain conditions, credit earned during the first year of veterinary school may be transferred back to NKU to meet the University's graduation requirements for the bachelor's degree. Students considering a three-year pre-veterinary program at NKU should, in consultation with an adviser, plan curricula that satisfy the requirements set forth under ""POLICY ON TRANSFER OF UNDERGRADUATE CREDIT" on page 34 of this catalog.

Because more students apply to veterinary schools than are accepted, it is strongly recommended that all pre-vet students plan their curricula in such a way that an additional year of coursework will enable them to complete all requirements for the bachelor of science, cellular/ molecular/genetics track in biology.

|  | $1^{\text {st }}$ Semester | $2^{\text {nd }}$ Semester |
| :---: | :---: | :---: |
| Freshman Year |  |  |
| BIO150/150L \& BIO 151/151L Introduction to Biology I and II | 4 | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120/120L \& CHE 121/121L General Chemistry I and II | 4 | 4 |
| ENG 101 College Writing | 3 |  |
| HIS 100 History of Europe to 1713 | 3 |  |
| HIS 101 History of Europe, 1713 to the Present |  | 3 |
| ENG 206 Western World Literature I |  | 3 |
| SPE 101 Principles of Speech Communication | 3 |  |
| Total | 17 | 15 |
| Sophomore Year |  |  |
| BIO 291W Biological Literature \& Research |  | 3 |
| BIO 272 Medical and Biological |  |  |
| Terminology | 3 |  |
| BIO 302-302L General Microbiology |  | 4 |
| BIO 348 and BIO 349/349L Genetics/Cellular/Molecular Biology I \& II | 3 | 4 |
| CHE 310-310L, 311-311L Organic |  |  |
| Chemistry I and II | 4 | 4 |
| ENG 207 Western World Literature II |  | 3 |
|  |  |  |
| MAT 119 Pre-Calculus Mathematics | 3 |  |
| Total | 13 | 18 |
| Junior Year |  |  |
| BIO 396 Practicum: Veterinary Medicine | 2 | 2 |
| CHE 482 Biochemistry I | 3 |  |
| PHI 155 Ethics (or PHI 165 Logic) | 3 |  |
| PHY 211, 213 General Physics I and II | 5 | 5 |
| Electives in biological sciences |  | 3-5 |
| Electives in fine arts |  | 3 |
| Electives in social sciences | 3 | 3 |
| Total | 16 | 16-18 |

## Pre-Optometry

Students intending to enter the field of optometry should consult with the pre-optometry adviser in planning their curricula. In general, the bachelor of science, cellular/molecular/genetics track in biology with two semesters of calculus (MAT 120, 220) is a useful model.

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Residents of Kentucky are provided spaces at Indiana University School of Optometry (Bloomington), Southern College of Optometry (Memphis, Tennessee), and the University of Alabama at Birmingham School of Optometry. These students are exempt from out-of-state tuition.

## Pre-Pharmacy

Students planning a career in pharmacy may follow a pre-pharmacy curriculum at NKU for two years and then transfer to a school of pharmacy for the four years of professional training.

In preparation for admission to pharmacy schools, students should be familiar with specific entrance requirements as outlined in the most recent bulletins from the schools of their choice. The courses listed below can be considered as a core curriculum required by most pharmacy schools. However, individual colleges of pharmacy may require special prerequisite courses. For this reason, students must work closely with their advisers.

Since not all students who apply are admitted to a pharmacy school, we recommend that they work toward completion of the bachelor of science, cellular/molecular/genetics track in biology. This will allow them to continue to apply completed course work toward the completion of a degree with little if any loss of credit. Again, it is critical that they work closely with their advisers.

|  | $\mathbf{1}^{\text {st }}$ Semester | 2 $^{\text {nd }}$ Semester |
| :--- | :---: | :---: |
| Freshman Year |  |  |
| BIO150/150L,BIO 151/151L <br> Introduction to Biology I and II | 4 | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120-120L, 121-121L General <br> Chemistry I and II | 4 | 4 |
| ECO 201 Principles of Microeconomics |  | 3 |
| ENG 101 College Writing | 4 |  |
| MAT 129 |  | 3 |
| CMST 101 Principles of Speech <br> Communication | $\mathbf{1 5}$ | $\mathbf{1 8}$ |
| Elective | 4 |  |
| Total | 4 | 4 |
| Sophomore Year | 3 |  |
| BIO 302-302L General Microbiology | 46 |  |
| CHE 310-310L, 311-311L Organic <br> Chemistry I and II | $\mathbf{4}$ |  |
| BIO 291W Biological Literature and <br> Research |  | 3 |
| STA 205 Introduction to Statistical <br> Methods | $\mathbf{1 7}$ |  |
| PHY 211, 213 General Physics I and II | 5 | 5 |
| Electives | Total |  |

## Pre-Physical Therapy

Students planning a career in physical therapy may complete their pre-professional coursework at NKU. For most physical therapy schools the requirement is a bachelor's degree that includes specified pre-professional coursework. Once this work is completed students may apply for admission to and, if accepted, transfer to an institution offering a degree in physical therapy. At the earliest opportunity, students should schedule an appointment with a faculty adviser to discuss minimum requirements for admission to schools of physical therapy.

Students are accepted into physical therapy programs at the University of Kentucky (Lexington and Hazard) without a bachelor's degree (see pre-professional requirements below. Those completing these programs are awarded dual degrees: a Bachelor of Health Science and a Master of Science in Physical Therapy. Along with most other schools, starting with the 2005 class, Bellarmine College (Louisville) will require that all
accepted students have a baccalaureate degree prior to admission. For up-to-date information, students should check current catalogs or web sites of any schools they are interested in. For UK the website is http:// www.mc.uky.edu/PT and the website for Bellarmine it is http://www.bellarmine.edu/.

We strongly recommend that pre-physical therapy students pursue a bachelor of science in either the general biology or cellular/molecular/ genetics tracks. By so doing if a student is not accepted into a physical therapy school or decides not to go in that direction, he or she will be able to apply completed work toward a bachelor's degree at NKU with little or no loss of credit.

|  | $1{ }^{\text {st }}$ Semester | $2^{\text {nd }}$ Semester |
| :---: | :---: | :---: |
| Freshman Year |  |  |
| BIO 150/150L and BIO 151/151L Introduction to Biology I and II | 4 | 4 |
| BIO 155 Orientation to Biology |  | 1 |
| CHE 120-120L, 121-121L General |  |  |
| Chemistry I and II | 4 | 4 |
| ENG 101 College Writing | 3 |  |
| MAT 129 | 4 |  |
| STA 205 Introduction to Statistical Methods |  | 3 |
| PSY 100 Introduction to Psychology |  | 3 |
| General education elective in humanities/ fine arts |  | 3 |
| Total | 15 | 18 |
| Sophomore Year |  |  |
| BIO 272 Medical and Biological Terminology | 3 |  |
| BIO 300-300L Comparative Vertebrate |  |  |
| Anatomy | 5 |  |
| BIO 291W Biological Literature and Research |  | 3 |
| PHY 211, 213 General Physics I and II | 5 | 5 |
| General Education electives in history | 3 | 3 |
| General education elective in humanities/ fine arts |  | 3 |
| Developmental Psychology |  | 3 |
| Total | 16 | 17 |

Students must make certain that they complete all required pre-professional courses as well as the general education requirements for any university to which they plan to apply.

In addition to the required courses listed here, volunteer work and certification in first aid and in CPR may be required. Students are encouraged to take some coursework in summer to reduce the heavy course load in fall and spring semesters.

For some, it may be more realistic to plan on three years at NKU instead of two in preparation for the UK program.

## Pre-Physician Assistant

Students planning a career as a physician assistant may complete pre-professional coursework at Northern while earning a bachelors degree in the biological sciences. Physician assistant programs are generally masters degree programs that require a bachelors degree prior to entry. For example, the University of Kentucky offers a Master of Science in Physician Assistant Studies. Admission to the program requires: 1) a bachelors degree from an accredited college with a minimum GPA of 3.0 on a 4.0 scale; 2) a combined score of 1200 on the GRE; and 3) a minimum grade of $C$ on pre-requisite courses. Prerequisite courses include the following

BIO 150 \& 151 Introduction to Biology I and II
BIO 155 Orientation to Biology

BIO 272 Medical and Biological Terminology<br>BIO 302 General Microbiology<br>BIO 425 \& 426 Mammalian Anatomy \& Physiology I \& II<br>CHE 120 \& 121 General Chemistry I \& II<br>CHE 310 \& 311 Organic Chemistry I \& II<br>PSY 100 Introduction to Psychology<br>PSY 220 Lifespan Development or<br>PSY 320 Psychology of Adult Development<br>ANT 100 Cultural Anthropology or SOC 100 Introductory Sociology

Students interested in completing prerequisite requirements for a physician assistant program should follow the plan presented earlier for a bachelor of science, general biology or cellular/molecular/genetics track. Courses listed above that are not a part of the biology degree may be taken as partial fulfillment of general education requirements. At the earliest opportunity, students should schedule an appointment with a faculty adviser to discuss their interest in becoming a physician assistant. For up-to-date information about the UK program, you may access their website at http:/www.mc.uky.edu/PA. Students interested in physician assistant programs at other universities should consult the catalogs or web sites of those institutions.

## Pre-Forestry

Students interested in forestry may take their first two years of coursework at NKU and then finish work for the bachelor's degree in forestry at a forestry school. Realizing that many students do not go on to forestry school for one reason or another, we recommend that they follow one of the bachelor degree tracks presented earlier (B.S. and B.A.). By so doing it is likely that little if any credit will be lost when a change of direction does occur. In addition to pre-professional requirements, students will have to complete general education requirements of the school they attend. Pre-professional requirements for forestry school at the University of Kentucky include the following:

MAT 111 Introductory Linear Mathematics
MAT 119 Pre-Calculus Mathematics
MAT 129 Calculus I
STA 205 Introduction to Statistical Methods
CHE 120 \& 121 Introduction to General Chemistry I \& II
BIO 150 \& 151 Introduction to Biology I \& II
BIO 155 Orientation to Biology
PHY 211 General Physics I
ECO 201 Principles of Microeconomics
AEC Economics of Food \& Agriculture (to be taken at UK)
GEO 306 Environmental Resource Management
SOC 340 Population or SOC 355 Sociology of the Environment
At the earliest opportunity, students should schedule an appointment with an adviser and consult the catalogs or web sites of any forestry schools that they plan to consider. The University of Kentucky website is http://www.uky.edu/agriculture/forestry.html. The curriculum plan for general biology, presented earlier, may be used as a guide for planning the first year of coursework.

## Pre-Wildlife Management

Students interested in wildlife management may complete their first two years of coursework at NKU and then finish work for the bachelor's degree in wildlife management at a university offering such a degree. Realizing that many students do not go on to a wildlife management program for one reason or another, we recommend that they follow one of the bachelor's degree tracks presented earlier (B.S. or B.A.). By so doing it is likely that little if any credit will be lost when a change of direction does occur. At the earliest opportunity, students should consult the catalog or website (Eastern Kentucky University students should refer to http.www.biology.eku.edu/FREDERIC/wild.htm) of the wildlife management program they plan to attend and work with an NKU adviser to make certain that minimum requirements for admission are met.

## Chemistry

## Department

## FACULTY

Diana McGill, chair
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## CONTACTING THE DEPARTMENT

The Department of Chemistry is located in SC 204F and may be reached during business hours by phone at 859-572-5409. Visit the department's website at http://www.nku.edu/~chemistry.

Diana McGill, chair mcgill@nku.edu

## CHEMISTRY PROGRAMS

A major in chemistry can lead to a variety of careers, including chemical research and development, medicine, pharmacy, teaching, law, and business. It can also lead to careers in interdisciplinary sciences such as biochemistry, forensics, molecular biology, pharmacology, toxicology, geochemistry, computer science, chemical physics, and chemical engineering. The department offers a modern curriculum leading to a Bachelor of Science approved by the American Chemical Society. A Bachelor of Arts can also be earned as can a minor in chemistry. Students interested
in biochemistry may earn the B.S. (Biochemistry track). Students interested in forensics may earn the B.S. (Forensic Science Track).

Pre-professional students (pre-medical, pre-dental, pre-veterinary, and pre-pharmacy) may also choose chemistry as their major. The B.S. (Biochemistry track) is particularly suited for pre-professional students.

## GENERAL EDUCATION COURSES OFFERED

CHE 105 Discovering Chemistry with Laboratory
CHE 112, 112L Chemistry and Society
CHE 115, 115L Physiological Chemistry
CHE 120, 120L General Chemistry I
CHE 121, 121L General Chemistry II
CHE 391W Chemical Information and Writing (satisfies the second writing requirement in place of ENG 291; primarily for chemistry majors, but other science majors may be permitted to enroll in the course as space allows.)

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

While there are no specific requirements for declaration of a chemistry major, there are some requirements for registering for the first course in the Chemistry major, CHE 120 General Chemistry I. The prerequisite is high school chemistry and a minimum score of 20 on the ACT math section or equivalent, or a $C$ or better in CHE 102, or placement. Students should contact the Department of Chemistry to schedule a Challenge Test if they had high school chemistry, scored less than 20 on the ACT math section and wish to try to test into General Chemistry I.

## BACHELOR'S DEGREE PROGRAMS

A major in chemistry may be obtained with either a Bachelor of Science or a Bachelor of Arts. Students who aspire to careers as profes-

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sional chemists should seek to obtain the Bachelor of Science. Students majoring in chemistry are urged to participate in independent research (CHE 492). Students majoring in chemistry are also encouraged to take at least one year of a foreign language, one course in computer science (e.g., CSC 260 or above) and math beyond calculus II.

## Bachelor of Science

This degree program meets requirements for American Chemical Society certification. This degree is designed to offer students a rigorous background in chemistry that will prepare them for careers in industrial chemistry and for graduate work in chemistry. With the addition of one year of biology, this track is also well suited as a pre-professional degree (pre-medicine, pre-vet, pre-dental). A student completing the Bachelor of Science in Chemistry is not required to complete a minor or an area of concentration.

The Bachelor of Science, major in chemistry, requires the following courses.

| Course | Offered |
| :---: | :---: |
| CHE 120-120L General Chemistry I with Laboratory | Fall and Spring |
| CHE 121-121L General Chemistry II with Laboratory | Spring and Summer |
| CHE 310-310L Organic Chemistry I with Laboratory | Fall and Spring |
| CHE 311-311L Organic Chemistry II with Laboratory | Spring and Summer |
| CHE 320-320L Inorganic Chemistry with Laboratory | Spring |
| CHE 340-340L Analytical Chemistry with Laboratory | Fall |
| CHE 350-350L Instrumental Analysis with Laboratory | Spring |
| CHE 360-361 Physical Chemistry I and II | Fall -Spring |
| CHE 362L Physical Chemistry Laboratory | Spring |
| CHE 391W Chemical Information and Writing | Spring |
| CHE 400 Chemistry Seminar | Fall, occasionally Spring |
| CHE 482 Biochemistry I | Fall |
| MAT 129 and 229 or MAT 128, 227, 228 (Calculus I and II) or equivalent and PHY 220 and 222 (University Physics) are also required. |  |
| At least 3 additional semester hours of the following advanced content courses. |  |
| CHE 410 Spectrometric Identification of Compounds | Spring odd years |
| CHE 440 Environmental Chemistry | Spring even years |
| CHE 483 Biochemistry II | Spring |
| CHE 511 Advanced Organic Synthesis | Fall odd years |
| CHE 512 Physical Organic Chemistry | Fall even years |
| CHE 560 Quantum Mechanics | Occasionally |
| At least three additional semester hours of the following advanced research methods courses: |  |
| CHE 392 Advanced Laboratory Projects | As needed |
| CHE 482L Biochemistry I Laboratory | Fall |
| CHE 483L Biochemistry II Laboratory | Spring |
| CHE 492 Research: Chemistry | As needed |
| CHE 505 History of Chemistry | Occasionally |
| Total CHE hours: 50 | Total hours: 67 |

## Bachelor of Science (Biochemistry Track)

This track is designed for students who have interests in both chemistry and biology. In particular, it is designed for those students who are interested in the chemistry of living organisms. It is well suited for those students who wish to pursue careers in biochemistry-related fields or for those students who wish to further their education in graduate school or in professional schools such as medical, dental, veterinary, pharmacy, etc. A
student completing this major is not required to complete a minor or an area of concentration.

The Bachelor of Science, major in chemistry (biochemistry track), requires the following courses in biology and chemistry.

| Course | Offered |
| :--- | :--- |
| CHE 120-120L General Chemistry I with Laboratory | Fall and Spring |
| CHE 121-121L General Chemistry II with Laboratory | Spring and Summer |
| CHE 310-310L Organic Chemistry I with Laboratory | Fall and Spring |
| CHE 311-311L Organic Chemistry II with Laboratory | Spring and Summer |
| CHE 340-340L Analytical Chemistry with Laboratory | Fall |
| CHE 360-361 Physical Chemistry I and II | Fall - Spring |
| CHE 362L Physical Chemistry Laboratory | Spring |
| CHE 391W Chemical Information \& Writing | Spring |
| CHE 400 Chemistry Seminar <br> CHE/BIO 482/482L Biochemistry I with Laboratory | Fall, occasionally <br> Spring |
| CHE/BIO 483/483L Biochemistry II with Laboratory | Spring |
| BIO 150-150L, 151-151L Introduction to Biology I and <br> II with Laboratories | Fall - Spring or <br> Spring - Summer |
| BIO 348 Genetics, Molecular and Cell I | Fall |
| MAT 129 and 229 or MAT 128, 227, 228 (Calculus I <br> and II) or equivalent <br> and PHY 211 and 213 (General Physics) or PHY 220 <br> and 222 (University Physic) are also required |  |
| At least two of the following five courses: | Spring |
| BIO 302-301L General Microbiology | Fall |
| BIO 349/349L Genetics, Molecular and Cell II \& Lab | Spring |
| BIO 360 Biology of the Cell | Spring |
| BIO 400-400L Molecular Biology of the Gene | Fall, Spring, Summer |
| CHE 350-350L Instrumental Analysis with | hours |
| Total |  |

## Bachelor of Science (Forensics Track)

This track is designed to provide students who wish to pursue a career in forensic science with a solid background in chemistry while giving them the basic knowledge that they will need in order to succeed in the criminal justice system. While a student completing this major is not required to complete a minor or an area of concentration, we strongly recommend that majors in this track complete the minor in criminalistics offered by the Department of Political Science. By doing so, they will be much better prepared to work with other law enforcement professionals. Due to the complexity of this program, it is critical that students work closely with their assigned advisor from the very beginning.

The Bachelor of Science, major in chemistry (forensics track) requires the following courses.

| Course | Offered |
| :--- | :--- |
| CHE 120-120L General Chemistry I with Laboratory | Fall, Spring |
| CHE 121-121L General Chemistry II with Laboratory | Spring, Summer |
| CHE 310-310L Organic Chemistry I with Laboratory | Fall, Spring |
| CHE 311-311L Organic Chemistry II with Laboratory | Spring, Summer |
| CHE 340-340L Analytical Chemistry with Laboratory | Fall |
| CHE 360-361 Physical Chemistry I and II | Fall - Spring |


| CHE 362L Physical Chemistry Laboratory | Spring |
| :--- | :--- |
| CHE 391W Chemical Information \& Writing | Spring |
| CHE 400 Chemistry Seminar | Fall, occasionally <br> Spring |
| CHE/BIO 482-482L Biochemistry I and Lab | Fall |
| BIO 150-150L, 151- 151L, Introduction to Biology I <br> and II with Laboratories | Fall - Spring or <br> Spring - Summer |
| BIO 348 Genetics/Cell/Molecular Biology I | Fall |
| BIO 349-349L Genetics/Cell/Molecular Biology I | Spring |
|  |  |
| BIO 400-400L Advanced Molecular Biology with Lab | Fall |
| MAT 129 and 229 or MAT 128, 227, 228 (Calculus I <br> and II) or equivalent and STA 205, PHY 211 and 213 <br> (General Physics) or PHY 220 and 222 (University <br> Physics), JUS 101 Introduction to Criminal Justice, JUS <br> 204 Criminal Investigation are also required |  |
| At least one of the following courses | Spring |
| BIO 455 Scanning Electron Microscopy | Spring |
| CHE 350-350L Instrumental Analysis with Laboratory | $\mathbf{3 4 - 4 1}$ |
| Total CHE hours | Total Hours |

## Bachelor of Arts

This degree track is designed for those students who are interested in teaching chemistry at the high school level or for those students who will graduate with two majors. A separate minor is required for graduation with this degree for students who have just one major.

The Bachelor of Arts, major in chemistry, requires the following courses. Semesters the courses are usually offered are listed above.

CHE 120-120L General Chemistry I with Laboratory
CHE 121-121L General Chemistry II with Laboratory
CHE 391W Chemical Information and Writing
CHE 310-310L Organic Chemistry I with Laboratory
CHE 311-311L Organic Chemistry II with Laboratory
CHE 340-340L Analytical Chemistry with Laboratory
CHE 360-361 Physical Chemistry I and II
CHE 362L Physical Chemistry Laboratory
CHE 400 Chemistry Seminar
At least three additional hours of 300-level or above Chemistry courses.
MAT 129 and 229 or MAT 128, 227, 228 (Calculus I and II) or equivalent and PHY 211 and 213, (General Physics) or PHY 220, and 222 (University Physics) are also required.
Total CHE hours: 35 Total hours: 53-55

## The Minor in Chemistry

A minor in chemistry requires eight hours of general chemistry (CHE 120, 120L, 121, 121L) plus an additional 12 semester hours of upper-level chemistry courses. Transfer students must take at least 4 of the 12 upper-level hours at NKU.

## PRE-PROFESSIONAL PROGRAMS

The following pre-professional programs are offered by the department: pre-dentistry and pre-medicine, pre-pharmacy, and pre-veterinary medicine.

To ensure proper planning, students must obtain approval of their programs through consultation with an adviser (a member of the chemistry faculty).

The following sample curricula are offered as guidelines.

## Pre-Dentistry and Pre-Medicine

In preparation for admission to dental or medical schools, it is advisable to obtain a broad background in natural sciences, social studies, and humanities. Students should consult bulletins from dental and medical schools of their choice for specific entrance requirements. The usual minimum requirements for admission to dental or medical schools are listed elsewhere in this catalog.

In the fall of their junior year, students must register with NKU's Pre-Medical and Pre-Dental Review Board to indicate intended application to these professional schools.

The sample curriculum below lists general requirements and leads to the Bachelor of Science, Biochemistry Track. Please note that any of the four chemistry tracks can apply toward medical or dental school admissions with the addition of Introduction to Biology I and II.

|  | 1st semester | 2nd semester |
| :---: | :---: | :---: |
| Freshman Year |  |  |
| CHE 120-120L, 121-121L, General |  |  |
| Chemistry I and II | 4 | 4 |
| BIO 150-150L, 151-151L |  |  |
| Introduction to Biology I and II | 4 | 4 |
| ENG 101 College Writing | 3 |  |
| SPE 101 Prin. of Speech Communications |  | 3 |
| 129, 229 Calculus I and II | 4 | 5 |
| Total | 15 | 16 |
| Sophomore Year |  |  |
| CHE 310-310L, 311-311L Organic |  |  |
| Chemistry I and II | 4 | 4 |
| BIO 400-400L or BIO 302-302L | 4 |  |
| BIO 360 |  | 3 |
| PHY 211, 213 General Physics I and II | 5 | 5 |
| General education electives | 3 | 3 |
| CHE 391W Chemical Information \& Writing |  | 3 |
| Total | 16 | 18 |
| Junior Year |  |  |
| CHE 340-340L Analytical Chemistry | 4 |  |
| CHE 350-350L Instrumental Analysis |  | 4 |
| CHE 482-482L Biochemistry I and Lab | 4 |  |
| CHE 483-483L Biochemistry II and Lab |  | 4 |
| CHE 492 Research: Chemistry | 1 | 1 |
| General Education electives | 6 | 6 |
| Total | 15 | 15 |
| Senior Year |  |  |
| CHE 360-361 Physical Chemistry I and II | 3 | 3 |
| CHE 362 Physical Chemistry Laboratory |  | 2 |
| CHE 400 Seminar | 1 |  |
| CHE 492 Research Chemistry | 1 | 1 |
| Electives | 12 | 12 |
| Total | 17 | 18 |

## Pre-Pharmacy

The usual pre-pharmacy curriculum involves two or three years of work at NKU. If students do not gain admission to pharmacy school, they may then graduate with a bachelor's degree at NKU by completing the requirements for a chemistry major. Individual colleges of pharmacy may require different prerequisite courses than those listed in this sample curriculum. Students are responsible for familiarizing themselves with requirements of their schools of interest and should work closely with their advisors.

|  | 1st semester | 2nd semester |
| :--- | :--- | :--- |
| Freshman Year |  |  |


| CHE 120-120L, 121-121L, General |  |  |
| :--- | :---: | :---: |
| Chemistry I and II | 4 | 4 |
| BIO 150-150L, 151-151L: | 4 | 4 |
| Introduction to Biology I and II | 3 |  |
| ENG 101 College Writing | 4 | 3 |
| CMST 101 Prin of Speech Communication |  | 6 |
| MAT 129 Calculus I |  | 15 |
| Electives |  | 17 |
|  |  | 4 |
| Sophomore Year | 5 | 4 |
| CHE 310-310L, 311-311L Organic | 4 |  |
| Chemistry I and II |  | 3 |
| PHY 211, 213 General Physics I and II |  |  |
| BIO 302-302L General Microbiology | 4 | 3 |
| CHE 391W Chemical Information \& Writ- <br> ing |  | 3 |
| STA 205 Statistics | 15 | 18 |
| BIO 208-208L |  |  |
| ECO 201 |  |  |

## Pre-Veterinary Medicine

Although Kentucky does not have a school of veterinary medicine, a limited number of students who are residents of Kentucky are selected to enter training in veterinary medicine at Auburn University, Auburn, Alabama, and Tuskegee Institute, Tuskegee, Alabama. The students are exempt from out-of-state tuition. Students generally need to maintain a grade-point average (GPA) of at least 3.20 to be competitive for admission.

It is sometimes possible to enter Veterinary School with three years of study at NKU. However, because many more students apply to veterinary schools than are accepted, it is strongly advised that all pre-vet students plan their curricula in such a way that the addition of a fourth year of coursework will satisfy NKU's requirements for the bachelor's degree in chemistry. To design a four-year curriculum that fulfills the pre-veterinary requirements and the requirements for a bachelor's degree in chemistry, interested students should consult with a chemistry advisor. Students should follow the curriculum set for pre-medicine and pre-dental students, and adapt that curriculum with help from their advisors, to meet the criteria set by the veterinary schools of their choice.

## Environmental Studies Minor

Chemistry majors who are interested in applying their chemistry background to environmental issues should strongly consider a minor in Environmental Studies. Interested students should work closely with Dr. Bullen (the department's environmental chemist) and Dr. Evans (the director of Environmental Studies) to design a minor that focuses on areas the student may be interested in pursuing.

## TEACHER EDUCATION IN THE PHYSICAL SCIENCES

The Bachelor of Arts, major in chemistry, is approved for certification to teach chemistry in Kentucky at the secondary level. Upon deciding to pursue the teacher education program, students must meet with the coordinator of certification and advisement in the College of Education and Human Services. Students pursuing teacher education certification in the physical sciences should review that portion of the undergraduate catalog relating to secondary education program requirements. To complete degree requirements, students must satisfy chemistry, education, and general education requirements.

## Masters

Master of Arts in English

## GENERAL EDUCATION COURSES OFFERED

## Literature

ENG 200 Introduction to Literature
ENG 201 Ideas in Literature
ENG 202 Survey of British Literature I
ENG 203 Survey of British Literature II ENG 206 Western World Literature I
ENG 207 Western World Literature II
ENG 208 Survey of American Literature I
ENG 209 Survey of American Literature II
ENG 211 Survey of Women's Literature I
ENG 212 Survey of Women's Literature II
ENG 216 Studies in Non-Western Literature
ENG 217 African-American Literature to 1940
ENG 218 African-American Literature 1940 to present
ENG 265 Literature and the Human Experience
ENG 266 Folklore and Literature
ENG 300 American Women Poets
ENG 301 American Novel
ENG 302 Literature and Film
ENG 303 British Novel
ENG 305 American Women Writers
ENG 306 Multicultural American Literature
ENG 308 Shakespeare I
ENG 309 Shakespeare II
ENG 311 Tragedy
ENG 312 Comedy
ENG 314 Modern European Literature in Translation
ENG 315 The Bible as Literature
ENG 318 The Short Story
ENG 320 Satire
ENG 322 Literature and Sexuality

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS <br> None

## Foreign Language Requirement for the English Major

All English majors are required to demonstrate (1) intermediatelevel proficiency in a foreign language previously spoken or used to satisfy the NKU entrance requirement or (2) novice-level proficiency in a second foreign language. Students can demonstrate intermediate-level proficiency by either completing a fourth-semester course in the language studied in high school or by attaining an acceptable score in the CLEP test in that language. Students can demonstrate novice-level proficiency by completing two semesters of a language not previously studied or spoken.

## Writing Instruction Program

The Writing Instruction Program offers the first-year writing courses (ENG 101 and 151) and the advanced writing course (ENG 291). All students at NKU must fulfill the Written Communication General Education requirement by receiving credit for these courses in one of the following three ways:

1. ENG 101 and ENG 291;
2. ENG 151, or
3. ENG 101 and a writing intensive 291 W course in the student's major.
Students not yet ready for ENG 101 must successfully complete ENG 090. Upon a student's admission to the university, test scores are used to determine placement into ENG 090 or ENG 101. For information about admissions test scores, writing course placement, and testing options, see the Admissions section in the NKU Undergraduate catalog. Visit the program’s website at http://www.nku.edu/~nkuwip.

## The Writing Center

The Writing Center (FH 209) offers free tutorial assistance in writing to all NKU students. Students enrolled in Writing Workshop (ENG 090) attend the center one hour a week for 10 weeks as a part of their coursework. Other students may come to the center for individual help with writing assignments required in their courses. Students using the Center are assisted by instructors from the Center and by trained student tutors.

The center is open from 8:30 a.m. to 6:00 p.m. Monday through Thursday, and 8:30 a.m. to 3:00 p.m. Friday.

## Assessment

All graduating seniors are required to turn in a portfolio at the time their program is certified for graduation. Guidelines for the portfolio can be found in the English Major handbook. Performance on this assessment tool will have no bearing on a student's GPA or ability to graduate but will be used by the department for internal evaluation of programs and services. Students who do not turn in a portfolio will not be allowed to graduate.

## Grade Policy

No course in which a grade below a $C$ is earned can be used to fulfill the major course requirements in English.

## ENGLISH

The Department of English promotes critical, creative, and reflective expression among its students. Students engage with diverse literary and cultural texts as well as practice critical reading and effective written communication. The program emphasizes intellectual development and humanistic values that enable students to identify and pursue personal, civic, and career goals.

The major in English with emphasis on literature introduces students to texts from all periods of English and American literary history
and prepares students to understand the relation of these works to the time in which they were written and to the present day.

The major in English with emphasis on literature and writing, though still based on the study of literature, allows students to specialize as well in creative, technical, or business writing.

Through training in research, communication, comprehension, and analysis, the major in English helps prepare students for careers in many professional areas, including business, law, government, public relations, and teaching.

The major in English with secondary certification is offered for students who wish to be certified for teaching on the high school or junior high school level.

In addition to offering its major and minor programs, the faculty of English serves the general student population by teaching how to write effectively and to read critically, by offering elective courses in literature. The skills developed in writing and literature courses aid students in pursuing careers that involve communication, interpretation, and understanding of human behavior, as well as in developing an appreciation for good writing and literary artistry.

## ENGLISH

## BACHELOR DEGREE PROGRAMS

The degree of Bachelor of Arts is conferred upon students completing the major in English.

## Major in English Literature or Literature and Writing

The major in English consists of 42 semester hours, including 15 in the core courses, plus completion of one of the two curriculum options and the foreign language requirement.

## Core Course Component

ENG 202-203 (or ENG 206-207, which may be substituted for ENG 202-203 in Literature and Writing option)
ENG 308 or 309 Shakespeare I or II
American Literature ( 3 semester hours must be a survey course
[ENG 208, 209, 217, or 218] and 3 semester hours must be a (course at the 300 level or above)
Total 15

## Literature Option

ENG 206 Western World Literature I 3
ENG 350 Literary Criticism 3
British Literature, 400-level courses (at least 3 semester hours must be in British Literature course designated as pre-1800) 9
American Literature (at least 3 semester hours must be in pre-1900 literature: e.g., ENG 208 or ENG 461)
Electives in English, 300 level or above (may include ENG 207 Western World Literature II)
Total $\underline{27}$
One upper-division literature course must be designated as a diversity course.

## Literature and Writing Option

British Literature, 400-level courses (at least 3 semester hours must be a British Literature course designated pre-1800 6
American Literature
Writing courses, ENG 231 or above (excluding ENG 291, may include an extensive writing project offered under ENG 497 Special Project in Writing, maximum 6 hours)12

Electives, 300 level or above

$\underline{6}$

## Total

27
One upper-division literature course must be designated as a diversity course.

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## Major in English with Secondary Teaching Certification

The major in English with secondary teaching certification consists of 45 semester hours, plus completion of the foreign language requirement.

Students pursuing a major in English with secondary education certification should review that portion of this catalog relating to education and health/physical education. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and Human Services and with a secondary education advisor in English in the Department of English.

Students seeking certification to teach English must also take EDU 530 Reading in the Junior and Senior High Schools and complete the requirements for English, education, and general education.

ENG 200 Introduction to Literature (or equivalent)
ENG 202-203
ENG 308 or 309 Shakespeare I or II 3
American Literature
ENG 381 Introduction to Linguistics or ENG 382 History of the English Language
ENG 385 and 387 Teaching of English I and II 6
British Literature designated as pre-1800
British Literature designated as post-1800
World Literature (ENG 206 or 207 or a course in literature of a non-English-speaking country)

Electives in English ..... $\underline{9}$

Total

## MINORS IN ENGLISH <br> English

The minor in English consists of at least 21 semester hours, excluding ENG 101 and ENG 291, as follows:

ENG 202-203 Survey of British Literature I and II
Electives in English (at least 9 semester hours must be in 300-400-level courses)$\underline{15}$
Total ..... 21

## Creative Writing

The minor in Creative Writing consists of at least 21 semester hours, not including ENG 101 or ENG 291, as follows:
ENG 231 Introduction to Creative Writing, ENG 332 Fiction Writing, and ENG 334 Poetry Writing.

## History and Geography

## Department

## FACULTY

Jeffrey C. Williams, chair
Rebecca J. Bailey, Tripta Desai, Eric R. Jackson, Amy Kardos, William J. Landon, Francois LeRoy, Carol A. Medlicott, John J. Metz, Debra Meyers, Burke R. Miller, James Ramage, Jonathan T. Reynolds, Sharon A. Vance, Michael Washington, Andrea S. Watkins, Robert W. Wilcox

## CONTACTING THE DEPARTMENT

The Department of History and Geography is located in LA 415 and may be reached during business hours by phone at 859-572-5461. Visit the department's website at http://www.nku.edu/~hisgeo.

Jeffrey C. Williams, chair williamsj@nku.edu

## Electives chosen from:

ENG 340 Business Writing, ENG 345 Legal Writing, ENG 347 Technical Writing, ENG 355 Women’s Autobiographical Writing, ENG 358 Writing in Creative Genres, ENG 331 Persuasive Writing, ENG 431 Screenwriting, ENG 432 Novel Writing, ENG 433 Novel Writing II, ENG 497 Special Project: in Writing, JOU 130 Newswriting I, JOU 340 Feature Writing, ENG 348 Professional Editing for the Workplace, JOU 346 Copy Editing or any other writing courses numbered ENG 300 or above.

## Professional Writing

The Professional Writing minor consists of at least 21 semester hours, not including ENG 101 or ENG 291, as follows:

ENG 348 Professional Editing for the Workplace, ENG 349 Web Writing in the Profession, INF 101 Computer Literacy and Informatics or JOU 321 Desktop Publishing, either ENG 340 Business Writing or ENG 347 Technical Writing, and ENG 497 Special Project in Writing: Portfolio development.

Electives chosen from:
ENG 371 Traditional Grammar, ENG 231 Introduction to Creative Writing, ENG 345 Legal Writing, ENG 359 Writing in Workplace Genres, ENG 340 Business Writing or ENG 347 Technical Writing (whichever not taken to fulfill the above requirement), ENG 391 Persuasive Writing, ENG 431 Screenwriting, or ENG 497 Special Projects in Writing.

## English Minor for Business Students

One 200-level literature course
ENG 340 Business Writing 3
ENG 497 Special Project in Writing or ENG 291
Advanced Writing
Electives chosen from
either four literature courses (300-400 level) or two literature courses (300-400 level) and two foreign language courses
Total

## HISTORY PROGRAMS

Majors
History
Geography
Social Studies for Secondary Education Certification
Minors
History
Military History
Geography

## GENERAL EDUCATION COURSES OFFERED

HIS 100 History of Europe to 1713
HIS 101 History of Europe, 1713 to the Present
HIS 102 History of the United States through 1877
HIS 103 History of the United States since 1877
HIS 106 History of African Americans to 1877
HIS 107 History of African Americans since 1877
HIS 108 World History to 1500
HIS 109 World History since 1500
HIS 194 Honors Seminar
HIS 291W Advanced Historical Writing

HIS 431 Historical Themes in African American History HIS 444 History of Women in the United States to 1900 HIS 445 History of Women in the United States since 1900 GEO 100 Elements of Geography GEO 101 World Regional Geography GEO 102 Geography of the World's "Developed" Regions GEO 103 Geography of the Third World GEO 107 Diversity Mapped

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

None

## HISTORY AND GEOGRAPHY

The faculty of History and Geography encompasses two major academic disciplines, each of which is an integral part of the general education curriculum and each of which offers students opportunities for academic specialization. The disciplines also contribute to the following programs within the University: women's studies, international studies, Latin American studies, Afro-American studies, and teacher education.

While it is expected that students will acquire the special skills and techniques of each discipline, the basic emphasis should be on a broad, imaginative, humanistic approach to the study of people and their institutions.

## HISTORY

The major in history, leading to the degree of Bachelor of Arts, is 39 semester hours, the minor 21 semester hours. The faculty also offers a minor in military history, details of which are given below. Prerequisites for the major and minor are few, the general requirements broad. The faculty does not necessarily endorse the building-block concept of courses; generally, it embraces the idea of history as a "way of thinking" and assumes the best prerequisite for any course is the bright, imaginative student.

## Bachelor's Degree Programs

Students must complete (a) survey courses either HIS 100-101 or HIS 108-109 and either HIS 102-103 or HIS 106-107; (b) HIS 385 Art and Method of History; and (c) at least one upper-division course in each of the following areas: United States history, European history, and nonwestern history; and (d) two upper-division courses in race and/or gender history. All remaining history courses ( 9 semester hours) must be upperdivision. In addition, history majors must take one upper-division geography course. No grade below C may be applied to the major. Students majoring in history must have a grade-point average of at least 2.50 in courses counted towards the major in order to be certified for graduation.

Students who successfully complete HIS 194 Honors Seminar need complete only two additional survey courses, but they must take an additional upper-division course to complete the requisite 39 semester hours for the major.

The history major of 39 semester hours may also serve as the nucleus for an Area of Concentration leading to teacher certification. Students pursuing teacher certification must schedule an appointment with the coordinator of certification and advisement in the College of Education at the beginning of their sophomore year since requirements vary. See under "The Area of Concentration in Social Studies for Secondary Education Students" below for specific course requirements.

All students majoring in history are required to participate in outcomes assessment. This involves the compulsory submission of a portfolio of written work completed in history courses at NKU, as stipulated in instructions provided to graduating seniors each semester.

## MINORS IN HISTORY

## History

Requirements for the minor in history are as follows: (a) students must complete one of the survey sequences (HIS 100-101, HIS 102-103,

HIS 106-107 or 108-109); and (b) complete 15 additional semester hours in history (200-level or above). Only history courses where a student earns a C or better will count toward a history minor.

## Military History

The minor in military history offers a comprehensive range of courses in modern military history to students who are interested in the problem of war. It consists of 21 semester hours taken from the following:

## Required courses (6 semester hours)

Two courses from the following list 6
HIS 323 United States Military History 3
HIS 365 European Military History: Ancient World to Renaissance
HIS 366 European Military History: Renaissance to the Modern World

## Modern Wars (9 semester hours)

Three courses from the following list, each of which provides study of a significant modern conflict
HIS 311 The War for Independence and the Constitution, 1763-1789
HIS 409 The French Revolution
HIS 417 The Civil War and Reconstruction, 1860-1877 3
HIS 475 The First World War
HIS 476 The Second World War
HIS 565 The Vietnam War

Thematic courses (6 semester hours)
Two courses from the following list, each of which takes a
thematic approach to the larger problems of war and human development.
HIS 322 History of Naval Warfare
HIS 423 Diplomacy and Foreign Policy of the United States 3
HIS 473 Battles and Behavior I
HIS 474 Battles and Behavior II 3
Total semester hours
NOTE: Students who complete the military history minor will have completed the general education requirement in history and need not take the 100 -level survey courses. This provision applies to the minor only.

## GEOGRAPHY

Geography as a social science seeks to understand the impact that people have made upon their environment and to provide an explanation for the spatial distribution of phenomena relating to people.

Offerings in geography include: (1) systematic courses which examine in some detail spatial characteristics of human society; (2) regional courses, which seek to provide an understanding of characteristics of the world's regions while at the same time introducing basic geographic concepts; and (3) courses in geographic techniques, especially mapping.

## Faculty's Primary Objectives

1. To contribute courses supporting a major and a minor in geography as well as satisfying part of the general education requirements.
2. To provide a base of support for future professional training, such as a graduate degree in geography or urban and regional planning.
3. To contribute to the undergraduate experience by developing geography as a complement to existing programs in the liberal arts.
4. To support interdisciplinary programs (e.g., International Studies).
5. To contribute to the liberal arts background for students who plan careers in education or business.

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All students majoring in geography are required to participate in outcomes assessment. Information on the nature of assessment and a calendar of dates for submission of materials are available from the program faculty and from the department chair.

## Bachelor's Degree Programs

The major in geography, leading to the degree of Bachelor of Arts, consists of 37 semester hours in geography including

1. 10 hours in the following courses:

GEO 100 Geography Through Contemporary World Issues
GEO 108 Physical Geography
GEO 385 Transformation of Geography in Modern Times
GEO 370 Geography Methods and Applications
2. 27 additional hours, of which 21 must be at the upper division level.

Students majoring in geography are encouraged to take courses in other disciplines related to their area of geographic interest (e.g., courses in economics for those interested in economic geography, courses in anthropology for those interested in cultural geography, etc.).

## Minor in Geography

A minor in geography consists of 21 semester hours.

1. GEO 100.
2. Of the required 21 semester hours, at least 12 must be in geography at the 200-level or above.
3. Of the required 21 semester hours, at least 9 must be in systematic (topical) geography courses. Systematic courses are those other than GEO 100 and regional courses (GEO 101, 102, 103, 402, 403, 406, 407, 409, 410, 502, 507).

## SOCIAL STUDIES CERTIFICATION FOR SECONDARY EDUCATION STUDENTS

Students pursuing social studies certification should review that portion of the undergraduate catalog relating to secondary education program requirements. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and Human Services.

To complete degree requirements, students must satisfy social studies, education, and general education requirements.

The content course work in Social Studies includes the following 57 hours of classes:

1. History ( 27 hours)

HIS 100-101 European history sequence 6
HIS 102-103 U.S. history sequence 6
HIS 108-109 World history sequence 6
HIS 385 Art and Method of History 3
Two additional upper division history classes 6
2. Other social studies disciplines (30 hours)

PSC 100 American Politics3
PSC 102 Comparative Politics or PSC 103 International Politics
ANT 100 Cultural Anthropology or ANT 102 World Cultures
GEO 100 Geography Through Contemporary World Issues or GEO 101 World Regional Geography 3
ECO 205 Economics for Teachers 3
PSY 100 Introduction to Psychology 3
SOC 100 Introduction to Sociology 3
Three additional upper division classes in any
Social Studies discipline other than history
Total 57
An overall GPA of 2.50 is required for admission and retention of students in the Social Studies program.

## Mathematics <br> Department

## FACULTY

Kristen Fleming, chair
David B. Agard, Brooke Buckley, Chris Christensen, Daniel J. Curtin, Gina M. Foletta, Theodore R. Hodgson, Lisa J. Holden, Dhanuja Kasturiratna, Michael A. Klembara, Donald K. Krug, Andrew E. Long, Gail Mackin, Philip W. McCartney, Carl E. Miller, Stephen E. Newman, Bethany A. Noblitt, John S. Rankin, Patricia A. Sisson, Michael Waters, Steven V. Wilkinson

## CONTACTING THE DEPARTMENT

The Department of Mathematics is located in AST 305 and may be reached during business hours by phone at 859-572-5377. Visit the department's website at http://math.nku.edu

Kirsten Fleming, chair math@nku.edu

## MATHEMATICS PROGRAMS <br> Major <br> Mathematics

## Minor

Mathematics

## GENERAL EDUCATION COURSES OFFERED

MAT/STA 110 Introductory Probability
MAT 112 Applied Calculus
MAT 114 Finite Mathematics
MAT 115 Mathematics for Liberal Arts
MAT 118 Technical Mathematics
MAT 128 Calculus A
MAT 129 Calculus I
MAT 227 Calculus B
MAT 185 Introductory Discrete Mathematics
STA 113 Introduction to Probability and Statistics
STA 205 Introduction to Statistical Methods
STA 212 Statistics for Business Applications I

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

Students who plan to undertake studies in a mathematical or physical science, engineering, or any program requiring calculus (MAT 129 or MAT 128 and MAT 227) will need a background in mathematics equivalent to four years of high school work: Algebra I and II, geometry, trigonometry, and other fourth-year topics. Mathematics courses for other programs require at least Algebra I and Algebra II. Moreover, high school mathematics grades less than $B$ do not normally indicate mastery adequate for college mathematics courses; as a result, high school courses for which a grade lower than $B$ was received should not be considered part of the student's background.

Deficiencies in a student's mathematical background, resulting either from no prior acquaintance with certain subjects or from insufficient mastery of them, can be remedied in MAH 091, MAH 095, MAH

099, MAT 109 and MAT 119. MAH 095 and MAH 099 correspond to Algebra I and II respectively. MAH 091 corresponds to high school geometry. MAT 109 will prepare students for MAT 112, MAT 114, MAT 185 and MAT 119. MAT 119 is a pre-calculus course.

Students should select the appropriate first mathematics course in consultation with an adviser. Placement testing to aid in the decision can be arranged by the Testing and Disability Services. Students who have a Math ACT score of 18 or 19 (or equivalent SAT scores) and who wish to enroll in MAT 109 may contact the department office for placement testing information. Students must be careful to check the prerequisites for MAT and STA courses. In particular, a pre-requisite of "MAH 099 or placement" means that mastery of two years of high school algebra will be assumed.

The Faculty in the Department of Mathematics offer courses in traditional mathematics and statistics. Students who are interested in taking courses in either of these disciplines should consult a member of the faculty.

## Transfer Students

Transfer students must take at least 9 semester hours toward a major in mathematics at NKU. A minimum of 6 semester hours toward a minor must be taken at NKU.

## MATHEMATICS

## Bachelor's Degree Programs

A major in mathematics, leading to the degree of Bachelor of Science, requires the completion of both a common core of courses and one of four possible tracks. The courses required of all mathematics majors is listed below:

## Common Core

MAT 129 and MAT 229 (or MAT 128 and MAT 227 and MAT 228)

MAT 329
MAT 194
MAT 234
STA 250
CSC 270 or INF 260
MAT 497 or an approved capstone experience.

## Tracks

The following four tracks are designed to offer a variety of programs for students and allow for depth in particular areas in the mathematical sciences.

## Pure Mathematics Track

Track is designed for students intending to pursue graduate studies in mathematics.

MAT 302
MAT 310 or MAT 410
MAT 420 or MAT 430
Nine additional semester hours of MAT/STA courses at the 300level or above such that the program includes at least two 400 -level courses.

## Applied Mathematics Track

Track is designed for students interested in business or interested in the natural, social, behavior, or physical sciences.

## MAT 325

Two of MAT 330, MAT 360, MAT 375, and SCI 370
Nine additional semester hours of MAT/STA courses at the 300level or above.

## Statistics Track

Track is designed for students interested in probability and statistics.

STA 314
STA 315
STA 341
Nine additional semester hours of MAT/STA courses at the 300level, of which at least 3 hours must have the STA designator.

## General Mathematics Track

Track is open to all students interested in mathematics since it was designed to give coursework for students pursuing a mathematics/secondary education curriculum certification. Students interested in secondary education should review that part of this catalog relating to education and health/physical education. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and Human Services.

MAT 302
MAT 345
MAT 310 or MAT 410
STA 341
One of the following pairs of courses: MAT 310 and MAT 410; or MAT 325 and MAT 330; or MAT/STA 340 and STA 341; or any two 400-level courses.

Three additional semester hours of MAT/STA courses at the 300level or above is required if: a student completes the MAT 310 and MAT 410 pair; or a student completes the MAT/STA 340 and STA 341 pair; or a student uses MAT 410 to satisfy the pair of 400 -level courses.

A grade of $D$ is not applicable to the major. At least nine credit hours towards the major must be completed at NKU. Students majoring in mathematics are strongly urged to obtain a minor (or second major) in a related area. Such a minor enhances career opportunities and furthers understanding of the application of mathematics.

## The Minor in Mathematics

A minor in mathematics consists of 21 semester hours of mathematics and statistics courses ( 110 or above). A grade-point average of at least 2.00 in all mathematics and statistics courses is required. Transfer students must take at least 6 semester hours toward a minor at NKU.

Students interested in a mathematics minor should contact a member of the faculty. The following courses are suggested:

1. For students majoring in business or in behavioral or social sciences: MAT/STA 110, STA 205 or STA 212, and STA 314 and courses chosen from MAT 112, MAT 119, MAT 129 (or MAT 128 and MAT 227), STA 213, STA 312, STA 315 and MAT 375. For students with a good mathematics background, a better program would be MAT 129 and MAT 229 or (MAT 128 and 227 and MAT 228), MAT 234, STA 250, MAT/STA 340 and STA 341.
2. For students majoring in a physical science: MAT 129 and MAT 229 (or MAT 128 and MAT 227 and MAT 228), MAT 234, MAT 325, INF 260 or CSC 270, and courses chosen from STA 250, MAT 329, MAT 330, MAT/STA 340, STA 341, MAT 360, and MAT 430.
3. For students majoring in biological sciences: MAT 129 and MAT 229 (or MAT 128 and MAT 227 and MAT 228), and MAT 325 and courses chosen from MAT 119, STA 205, STA 250, STA 312, STA 314, STA 315, MAT/STA 340, STA 341 and MAT 375.

## Teacher Certification in Mathematics

Students pursuing a mathematics/secondary education curriculum should review that part of this catalog relating to education and health/ physical education. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of cer-

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tification and advisement in the College of Education and Human Services.

Certification to teach mathematics at the secondary level requires the completion of the coursework for the major in mathematics under the General Mathematics Track.

Certification to teach mathematics in grades 5-9 requires either 1 or 2 below.

1. The following courses:
a. MAT 140 and MAT 141.
b. MAT 240.
c. One of INF 101, INF 110, INF 120, or INF 260.
d. MAT/STA 110 and STA 205.
e. Two of MAT 109, MAT 112, MAT 114, MAT 115, MAT 119, MAT 128 or MAT 129, MAT 227, MAT 185.
2. A secondary-level mathematics major and both MAT 140 and MAT 240.

Certification for an academic emphasis in mathematics for certification in grades P-5 requires the following courses:

1. MAT 140 and MAT 141.
2. MAT 240.
3. One of INF 101, INF 110, INF 120, or INF 260.
4. MAT/STA 110 and STA 205.
5. One of MAT 109, MAT 112, MAT 114, MAT 115, MAT 119, MAT 128, MAT 129, MAT 227, MAT 185.
Any substitutions in these programs must be made in consultation with the mathematics chair.

## Music Department

## FACULTY

Kurt Sander, chair
Diana R. Belland, David Cole, Eric DeForest, David L. Dunevant, W. Jonathan Gresham, Gayle Sheard Grout, Carolyn Z. Hagner, Gary Johnston, Brant Karrick, Nina Key, Scott Lang, Shawn Okpebholo, Randy K. Pennington, Toni Sheffer, Vance Wolverton

## Patricia Corbett String Quartet in Residence

Hugo Bollschweiler, Julie Fischer, Christina Merblum, Rebecca Merblum

## Neyer Professor of Music

Sergei Polusmiak

## CONTACTING THE DEPARTMENT OF MUSIC

The Department of Music is located in FA 253 may be reached during business hours by phone at 859-572-6399. Interested persons are invited to browse the department's website at http://music.nku.edu.

Kurt Sander, chair sanderk@nku.edu

## MUSIC PROGRAMS

Bachelor of Music in Performance
Instrumental Piano Accompanying Emphasis
Jazz Studies Emphasis Piano Pedagogy Emphasis
Keyboard Voice
Bachelor of Music in Music Education
Choral/Vocal
Instrumental
Piano/Choral

## Bachelor of Arts

## Certificate

Piano Pedagogy

## GENERAL EDUCATION COURSES OFFERED

MUS 100 Music Appreciation
MUS 106 Music of World Cultures
MUS 107 Survey of African American Music
MUS 108 History of Rock and Roll
MUS 109 History of American Popular Music
MUS 110 Appreciation of Jazz
MUS 230 History of Music: Antiquity through Baroque

MUS 231 History of Music: Late Baroque to Mid 19 ${ }^{\text {th }}$ Century
MUS 291W Advanced Writing in the Music Profession

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

## Placement Requirements for All Music Degrees

Freshmen and transfer students are required to take examinations in music theory, ear training, piano, and applied performance for placement purposes. Transfer students must also take a music history examination if deemed appropriate by the department chair.

## Admission Requirements for All Music Degrees

Freshmen at Northern Kentucky University are admitted to the Department of Music simply as students majoring in music; that is, they are not admitted initially as majoring in performance, music education, composition, etc. While it is entirely appropriate for freshmen to have aspirations, hopes, or preferences for one major or another, admission to a specialization is deferred until the following requirements are in place:

## Time Frame

1. Students may petition to major during the sophomore year.
2. Transfer students have a general deadline of 15 December of the entering year to petition.
3. Transfer students planning to enter with junior standing or above must be admitted to a major prior to admittance.

## Recommendations

1. Accepted: The student may be admitted to major unconditionally.
2. Provisional: The student may be rejected from the major with the provision that he/she may reapply upon demonstration of improvement in designated areas.
3. Not Accepted: The student may be rejected unconditionally.

To apply for admission to any music degree program, the student must have

1. earned a minimum of 24 semester hours;
2. earned a minimum grade-point average of 2.50 in music courses;
3. completed Music Theory I and II with a grade of $C$ or better in each course;
4. completed Aural Skills 1-2 and 3-4 with a grade of $C$ or better in each course;
5. completed Class Piano 1-2 and 3-4 or equivalent with a grade of $C$ or better in each course;
6. passed the Freshman Proficiency Jury (MUS 197) in applied music.

To receive admission to any music degree program, the student must have

1. earned a minimum of 48 semester hours;
2. earned a minimum grade-point average of 2.50 in music courses;
3. completed Music Theory III and IV with a grade of $C$ or better in each course;
4. completed Aural Skills 5-6 and 7-8 with a grade of $C$ or better in each course;
5. completed Class Piano 5-6 and 7-8 (or MUS 296) with a grade of $C$ or better in each course;
6. passed the Junior Standing Jury (MUS 297) in applied music;
7. received a written recommendation from applied music instructor;
8. received approval from an interview with a faculty panel.

## DEPARTMENT POLICIES

1. Students who have been unsuccessful in their petition for a major are permitted to petition again for a different major or to petition again for the same major at a later time.
2. Students who have been denied a major or have not completed the requirements are permitted to register for basic-studies courses in music and/or general education but not for courses in the major specialization.

## Academic Standards

Candidates for degrees in music are required to receive a grade of $C$ or better in all music courses applied toward certification of the major or minor and to maintain a GPA of 2.50 in music courses.

## Applied Music Requirements

All students majoring or minoring in music, and majoring in musical theatre studying applied voice, must perform a jury before a panel of faculty members at the end of each semester. At this time their grade for that semester and the approval or disapproval to register for the next higher level of study will be decided.

All freshmen students majoring in music will be admitted as provisional majors. At the end of the first year (two semesters of applied study) students must pass a Freshman Proficiency Jury as part of the admission process to major declaration. At the end of four semesters of applied study, students must pass the Junior Standing Jury to successfully enter a major. If the four semesters are not completed consecutively, students must secure written permission from the appropriate faculty and the music chair to delay the examination. Students not approved in the Junior Standing Jury must petition to retake the examination. The Junior Standing Jury may be taken three times only and will be heard by at least three music faculty members who, by a majority vote, will grade the performance as pass or fail. A summary of the faculty vote is recorded and filed in students' permanent folders.

## Applied Music Instruction

Individual instruction for qualified students is available in wind, brass, percussion, and string instruments, organ, piano, voice, classical guitar, harp, and harpsichord. Private lessons are provided weekly for one-half or for one hour. Students studying privately may earn 1 or 2 semester hours. The number of semester hours is determined by the length of the lesson ( $1 / 2$ hour $=1$ semester hour; 1 hour $=2$ semester hours). Students will be assigned to applied-lesson instructors by the music chair or a designee. Students who have not passed their junior standing may not register for 300 or 400 -level applied courses. Request for a specific instructor will be honored when possible.

[^2]
## Performance Organizations

Membership in performance organizations is open to all qualified NKU students. Ensembles include Northern Chorale, Chamber Choir, Vocal Jazz, University Concert Band, Symphonic Winds, Brass Choir, Jazz Ensemble, Pep Band, NKU Philharmonic, Chamber Orchestra, Percussion Ensemble and Steel Drum Band. Opportunities for performance in chamber ensembles and Opera Workshop are also available. Interested students should call the music office to arrange audition.

Large ensemble requirements pertaining to curricula for music majors are satisfied only by Symphonic Winds, University Concert Band, Northern Chorale, Chamber Choir, Chamber Orchestra, and NKU Philharmonic.

## Recital Attendance

All students majoring in music, unless excused by the chair, must register each semester for MUS 196 Recital Review. Requirements for this course are satisfied by certified attendance at recitals approved and required by the course syllabus; grading is pass/fail. Students must earn no fewer than seven passing Recital Review grades to graduate with a degree in music. MUS 196 may be waived during a semester of a student teaching placement.

## Recital Performance

All students majoring in music must perform on weekly recital programs as directed by their applied music instructor. Students majoring in music performance must perform two major recitals, a junior (half) recital and a senior (full) recital. Students majoring in music education perform a junior recital prior to graduation. Students preparing junior and senior recitals must pass a recital jury audition at least one month prior to public performance. Guidelines for the preparation and scheduling of recitals are available from the music office.

## Piano Proficiency

All students majoring in music must pass a piano proficiency examination (MUS 296). Students found to be deficient through the placement test must enroll in group piano course or private applied piano instruction. Enrollment in these courses will continue until a student is able to pass the proficiency test. Students are expected to take the proficiency examination no later than the end of their sophomore year. Additional piano study beyond that required for the proficiency is highly recommended for music majors in all degree programs.

## Scholarships

Music scholarships are awarded to students who have made outstanding accomplishments or evidence significant potential. Please contact the music office for audition dates. Applied music juries at the end of fall semester serve as an evaluation and re-audition for continuing scholarship students.

## Advising

All students majoring or minoring in music will be assigned to an adviser from the music faculty. Students are urged to work in consultation with the adviser in order to insure proper selection and sequencing of courses.

## Special Instructional Programs

The preparatory division offers private instruction in many instruments and voice to students below college age, university students who are not majoring or minoring in music, and adult students. Interested students should contact the music office prior to the start of each semester or summer school for information.

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## DEPARTMENT'S MISSION

The mission of the Department of Music is to provide quality instruction to students choosing to pursue a major or minor in music. For those in other disciplines, the department offers courses and performing opportunities that will enhance one's cultural development. In addition, through a variety of musical programs and workshops, the department contributes to the cultural development of the University and the commu-nity-at-large.

## FACULTY'S PRIMARY OBJECTIVES

1. To provide quality instruction and training necessary to enable students to achieve artistic skill and understanding.
2. To strive for excellence in performance.
3. To prepare music students for their roles as professionals in the field of music.
4. To provide the academic and performance background necessary for admission to graduate school.
5. To enhance the cultural climate of the academic community, northern Kentucky, and the Commonwealth through the presentation of public music performance and through special instructional programs.
6. To help students acquire an understanding and appreciation of the interaction of music with the various humanistic disciplines.
7. To maintain faculty excellence by continued professional activity and involvement.
8. To provide diverse performing opportunities.

## BACHELOR'S DEGREE PROGRAMS

Programs leading to the following degrees are offered: Bachelor of Music and Bachelor of Arts.

## Bachelor of Music in Performance

All degree emphases in Performance are exempt from NKU's minor/area of concentration requirement.

## Instrumental

MUS 122, 123, 222, 223 Theory I, II, III, IV 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, $4 \quad 2$
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, 8 2
MUS 130 Introduction to Music Literature 2
MUS 196 Recital Review 0
MUS 197 Freshman Proficiency Jury 0
MUS 230 History of Music I 3
MUS 231 History of Music II 3
MUS 296 Piano Proficiency 0
MUS 297 Junior Standing Jury 0
MUS 312 Computer Applications for Musicians 1
MUS 325 Form and Analysis 3
MUS 337 History of Music III 3
MUS 352 Conducting I 2
MUS 397 Junior Recital 0
MUS 399 Independent Study: Repertoire/Pedagogy 3
MUS 497 Senior Recital 0
Applied major instrument (one contact hour per lesson) 16
Large Ensembles 8
Small Ensembles 6
Electives in music 12
Total 78

## Jazz Studies Emphasis

MUS 122, 123, 222, 223 Theory I, II, III, IV
MUS 124, 125, 126, 127 Aural Skills 1, 2, 3, 4
MUS 224, 225, 226, 227 Aural Skills 5, 6, 7, 8
MUS 130 Introduction to Music Literature
MUS 196 Recital Review

MUS 197 Freshman Proficiency Jury
MUS 231 History of Music II
MUS 235, 236 Jazz Harmony/Piano I, II 2
MUS 237, 238 Jazz Improvisation I, II 4
MUS 296 Piano Proficiency 0
MUS 297 Junior Standing Jury 0
MUS 306 or 317 Vocal Jazz or Jazz Ensemble 6
MUS 312 Computer Applications for Musicians 1
MUS 321, 322 Jazz Arranging I, II 4
MUS 337 History of Music III 3
MUS 339 History of Jazz 3
MUS 352 Conducting I
2
MUS 397 Junior Recital 0
MUS 424 Jazz Pedagogy 2
MUS 426 Jazz Styles and Analysis 3
MUS 497 Senior Recital 0
Applied Major Instrument/Voice 16
Jazz Combo 6
Large Ensemble 2
Electives in music 6
Total 83

## Keyboard

MUS 122, 123, 222, 223 Theory I, II, III, IV 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, 4 2
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, $8 \quad 2$
MUS 130 Introduction to Music Literature 2
MUS 196 Recital Review 0
MUS 197 Freshman Proficiency Jury 0
MUS 230 History of Music I 3
MUS 231 History of Music II 3
MUS 296 Piano Proficiency 0
MUS 297 Junior Standing Jury 0
MUS 311 Piano Accompanying and Chamber Music 4
MUS 312 Computer Applications for Musicians 1
MUS 325 Form and Analysis 3
MUS 331 Keyboard Literature I 2
MUS 337 History of Music III 3
MUS 352 Conducting I 2
MUS 397 Junior Recital 0
MUS 447 Seminar in Piano Pedagogy 3
MUS 497 Senior Recital 0
Applied Piano (one contact hour per lesson) 16
Ensembles (must have advisor's approval) 4
Electives in music 12
Total 74

## Piano Accompanying Emphasis

MUS 105, 305 Ensemble Accompanying (1-3 semester
hours per semester depending upon ensemble assignment) 13
MUS 122, 123, 222, 223 Theory I, II, III, IV 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, $4 \quad 2$
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, $8 \quad 2$
MUS 130 Introduction to Music Literature 2
MUS 196 Recital Review 0
MUS 197 Freshman Proficiency Jury 0
MUS 230 History of Music I 3
MUS 231 History of Music II 3
MUS 296 Piano Proficiency 0
MUS 297 Junior Standing Jury 0
MUS 311 Piano Accompanying and Chamber Music 4
MUS 312 Computer Applications for Musicians 1
MUS 325 Form and Analysis 3
MUS 337 History of Music III 3
MUS 352 Conducting I 2
MUS 397 Junior Recital 0

MUS 497 Senior Recital
Applied Piano (one contact hour per lesson)
Applied piano accompanying
(one half-hour private instruction weekly) 8
Electives in music
Total

## Piano Pedagogy Emphasis

MUS 122, 123, 222, 223, Theory I, II, III, IV 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, $4 \quad 2$
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, $8 \quad 2$
MUS 130 Introduction to Music Literature 2
MUS 196 Recital Review 0
MUS 197 Freshman Proficiency Jury 0
MUS 230 History of Music I 3
MUS 231 History of Music II 3
MUS 296 Piano Proficiency 0
MUS 297 Junior Standing Jury 0
MUS 312 Computer Applications for Musicians 1
MUS 325 Form and Analysis 3
MUS 331, 332 Keyboard Literature I, II 4
MUS 337 History of Music III 3
MUS 352 Conducting I 2
Applied Piano (MUS 185, 285, 385, 485) 16
Ensembles 7
MUS 311 Piano Accompanying and Chamber Music 2
MUS 348, 349, 448, 449 Piano Pedagogy I, II, III, IV 12
MUS 397 Junior Recital
0
MUS 497 Senior Recital 0
Electives in music 5
Total 79

## Voice

Two years of foreign language, selected in consultation with an applied voice instructor, are required. One year may be applied toward the general education requirement in humanities/fine arts.

MUS 301 or MUS 302 Northern Chorale or Chamber Choir 6
MUS 304 or MUS 310 Opera Workshop or Chamber Vocal 3
MUS 122, 123, 222, 223 Theory I, II, III, IV 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, $4 \quad 2$
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, 8 2
MUS 130 Introduction to Music Literature 2
MUS 196 Recital Review
MUS 197 Freshman Proficiency Jury
MUS 230 History of Music I
MUS 231 History of Music II
MUS 296 Piano Proficiency
MUS 297 Junior Standing Jury
MUS 312 Computer Applications for Musicians
MUS 325 Form and Analysis 3
MUS 333 Vocal Literature 3
MUS 337 History of Music III 3
MUS 352 Conducting I 2
MUS 354, 355 Lyric Diction I and II 6
MUS 397 Junior Recital 0
MUS 446 Vocal Pedagogy 3
MUS 497 Senior Recital 0
Applied Voice (one contact hour per lesson) 16
Applied piano (4 semesters) 4
Electives in music
5
Total

## Bachelor of Music in Music Education

Students pursuing a Bachelor of Music with teacher certification should review that portion of the University catalog relating to education and health/physical education (see listing under College of Education and Human Services). Upon approval to pursue the music teacher education
program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and Human Services. Music students will follow the guidelines for certification listed under Secondary Education 8-12.

Candidates for certification must meet Kentucky Department of Education certification requirements in both general and professional education. Students wishing to be certified in a state other than Kentucky are responsible for knowing and meeting certification requirements of that state. Each student should work in close consultation with an adviser in order to meet all non-music requirements. All degree emphases in Music Education are exempt from NKU's minor/area of concentration requirement.

## Choral/Vocal

MUS 122, 123, 222, 223 Theory I, II, III, IV 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, $4 \quad 2$
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, $8 \quad 2$
MUS 130 Introduction to Music Literature 2
MUS 196 Recital Review 0
MUS 197 Freshman Proficiency Jury 0
MUS 230 History of Music I 3
MUS 231 History of Music II 3
MUS 249 Instruments for Singers 1
MUS 296 Piano Proficiency 0
MUS 297 Junior Standing Jury 0
MUS 309 Introduction to Music Education 3
MUS 312 Computer Applications for Musicians 1
MUS 325 Form and Analysis 3
MUS 337 History of Music III
MUS 340 General and Vocal Music in the Elementary School 3
MUS 342 General and Choral Music in the Secondary School 3
MUS 352 Conducting I
MUS 353 Conducting II
MUS 354 Lyric Diction I
MUS 397 Junior Recital
MUS 446 Vocal Pedagogy
Applied Voice (two semesters of 300 level or above) 14
Elective in music history or literature ( 300 level or above,
choral or vocal literature recommended).
Ensembles 7
Total 76
Instrumental
MUS 122, 123, 222, 223, Theory I, II, III, IV 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, $4 \quad 2$
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, $8 \quad 2$
MUS 130 Introduction to Music Literature 2
MUS 196 Recital Review 0
MUS 197 Freshman Proficiency Jury 0
MUS 230 History of Music I 3
MUS 231 History of Music II 3
MUS 296 Piano Proficiency 0
MUS 297 Junior Standing Jury 0
MUS 309 Introduction to Music Education 3
MUS 312 Computer Applications for Musicians 1
MUS 325 Form and Analysis 3
MUS 337 History of Music III 3
MUS 340 General and Vocal Music in the Elementary School 3
MUS 341 Instrumental Music in the Public Schools 3
MUS 343 Marching Band Methods 3
MUS 352 Conducting I 2
MUS 353 Conducting II
MUS 397 Junior Recital
0
Applied music (major instrument; two semesters of 300 level or above)
Applied methods and materials
(MUS 146, 241, 243, 245, 247)
Large Ensembles ..... 7
Small Ensembles ..... 6
Total ..... 80
Piano/Choral
MUS 122, 123, 222, 223 Theory I, II, III, IV ..... 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, 4 ..... 2
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, 8 ..... 2
MUS 130 Introduction to Music Literature ..... 2
MUS 196 Recital Review ..... 0
MUS 197 Freshman Proficiency Jury ..... 0
MUS 230 History of Music I ..... 3
MUS 231 History of Music II ..... 3
MUS 249 Instruments for Singers ..... 1
MUS 296 Piano Proficiency ..... 0
MUS 297 Junior Standing Jury ..... 0
MUS 309 Introduction to Music Education ..... 3
MUS 312 Computer Applications for Musicians ..... 1
MUS 311 Piano Accompanying and Chamber Music ..... 4
MUS 325 Form and Analysis ..... 3
MUS 337 History of Music III ..... 3
MUS 340 General and Vocal Music in the Elementary School ..... 3
MUS 342 General and Choral Music in the Secondary School ..... 3
MUS 352 Conducting I ..... 2
MUS 353 Conducting II ..... 3
MUS 354 Lyric Diction I ..... 3
MUS 397 Junior Recital ..... 0
MUS 446 Vocal Pedagogy ..... 3
Applied Piano (two semesters of 300 level or above) ..... 14
Secondary applied voice (MUS 187, 287) ..... 4
Elective in music literature or piano pedagogy
(300 level or above) ..... 3
Ensembles ..... 7
Total ..... 84
Bachelor of Arts in Music
MUS 122, 123, 222, 223 Theory I, II, III, IV ..... 12
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, 4 ..... 2
MUS 224, 225, 226, 227, Aural Skills 5, 6, 7, 8 ..... 2
MUS 130 Introduction to Music Literature ..... 2
MUS 196 Recital Review ..... 0
MUS 197 Freshman Proficiency Jury ..... 0
MUS 230 History of Music I ..... 3
MUS 231 History of Music II ..... 3
MUS 296 Piano Proficiency ..... 0
MUS 297 Junior Standing Jury ..... 0
MUS 312 Computer Applications for Musicians ..... 1
MUS 325 Form and Analysis ..... 3
MUS 337 History of Music III ..... 3
Applied music (major instrument; must pass Junior Standing) ..... 8
Electives in music (must have advisor's approval) ..... 12
Ensembles ..... 6
Total ..... 57
The Minor in Music
MUS 122, 123 Theory I and II ..... 6
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, 4 ..... 2
Electives in music history or literature ..... 6
Two semesters of applied music ..... 2
Two semesters of ensembles ..... 2
Electives in music (must have adviser's approval) ..... ㅇ
Total ..... 26

## Certificate in Piano Pedagogy

The Certificate in Piano Pedagogy is a 34 -semester-hour certificate program. It addresses the need of musicians in the northern Kentucky/ greater Cincinnati metropolitan community who are currently involved in teaching piano and who wish to enhance and improve their skills. The purpose of the program is (1) to train pianists who desire further training in piano and related skills but who lack the means for completing a degree in piano and (2) to provide training in skills of piano teaching to those who hold degrees in piano or other areas and who wish to raise the quality of their work to a more effective and professional level.

Semester hours earned on the certificate may be applied toward a music degree.
MUS 122, 123 Theory I, II ..... 6
MUS 124, 125, 126, 127, Aural Skills 1, 2, 3, 4 ..... 2
MUS 296 Piano Proficiency ..... 0
MUS 311 Piano Accompanying and Chamber Music ..... 2
MUS 331 or 332 Keyboard Literature I or II ..... 2
MUS 345, 346 Keyboard Skills I, II ..... 2
MUS 348, 349, 448, 449 Piano Pedagogy I-IV ..... 12
Applied piano (one contact hour per week for four semesters) ..... 8
Total ..... 34

## Physics and Geology

## Department

## FACULTY

Charles E. Hawkins, chair
C. Dale Elifrits, director of pre-engineering and outreach

John D. Rockaway, director of geology
Morteza Sadat-Hossieny, coordinator of engineering technology
Seyed Allameh, Janet Bertog, Samuel Boateng, Wayne J. Bresser, Sharmanthie Fernando, John E. Filaseta, Sara E. Johnson, Raymond C. McNeil, Scott L. Nutter, Mark Rajai, Karl J. Vogler, Harold Wiebe, Matthew O. Zacate

## CONTACTING THE DEPARTMENT

The Department of Physics and Geology is located in SC 204H and may be reached during business hours by phone at 859-572-5309. The

Engineering Technology office is located in ST 226; contact Dr. Morteza Sadat-Hossieny at 859-572-5762 or 859-572-1549 for information. Visit the department's website at http://physics.nku.edu/.

Charles E. Hawkins, chair hawkins@nku.edu

## PHYSICS AND GEOLOGY PROGRAMS <br> Majors

Electronics Engineering Technology
Geology
Mechanical and Manufacturing Engineering Technology
Physics
Dual-Degree Program (Pre-Engineering)
Teacher Education Certification in Earth and Space Science Teacher Education Certification in Physics

## Minors

Geology
Physics
Electronics Technology

## Certificates

Automated Manufacturing Processes and Systems
Manufacturing Processes
Technological Leadership and Innovation

## GENERAL EDUCATION COURSES OFFERED

AST 110 The Solar System
AST 115 Stars, Galaxies, and Cosmology
GLY 110 The Face of the Earth with Lab
GLY 120 This Dangerous Earth
GLY 130 Dinosaurs
GLY 155L Regional Geology Laboratory
GLY 220 History of the Earth
GLY 230 Geology of the National Parks
GLY 240 Geology of Natural Resources
PHY 101 Einstein 101
PHY 110 Introduction to Physics with Lab
PHY 115 Physics of Music and Sound
PHY 211 General Physics with Laboratory I
PHY 213 General Physics with Laboratory II
PHY 220 University Physics with Laboratory I
PHY 222 University Physics with Laboratory II

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

## None

## ASTRONOMY, GEOLOGY, PHYSICS, ENGINEERING, AND TECHNOLOGY

The Department of Physics and Geology houses the disciplines of Astronomy, Geology, and Physics as well as applied programs in PreEngineering and Engineering Technology. The bachelor's degree may be earned with a major in geology or physics, electronics engineering technology, or mechanical and manufacturing engineering technology. Minors are available in geology, physics, or electronics technology. Selected graduate courses, intended primarily for K-12 teachers, are also offered in astronomy, geology, and physics. Courses that satisfy the general education requirement in natural sciences are offered in astronomy, geology, and physics.

## ASTRONOMY

The study of astronomy is an excellent means with which to present scientific procedure to non-science students. As one of the oldest sciences, astronomy has a rich history; yet modern astronomy carries with it the excitement of discovery and confrontation with the unknown. As a discipline, astronomy relies heavily on the contributions of other sciences, especially the physical sciences. Although neither a major nor a minor is currently offered in astronomy, courses in astronomy may be used to satisfy the general education requirement in natural sciences. In addition, astronomy courses numbered 300 and above may be applied toward a major in physics or toward a minor in physics.

## GEOLOGY

## Bachelor's Degree Programs

The degree of Bachelor of Science with a major in geology is designed to give students a strong background in the geological sciences prior to beginning a career in one of the geology-related professions or continuing on to graduate work. The degree of Bachelor of Arts with a major in geology is most appropriate for persons seeking dual majors who wish to have a background in geology to complement another major.

## Bachelor of Science

The Bachelor of Science in geology requires 41 semester hours of geology courses; a grade of $C$ or higher must be earned in all courses counting toward the major. Additional requirements for the major include

CHE 120-120L, 121-121L, PHY 211, 213, MAT 119 and either MAT 128 or MAT 129 or STA 205. Students interested in the application of geology in environmental studies may take courses emphasizing hydrogeology. Upon completion of the requirements for a Bachelor of Science degree, students are eligible to take the Geologist Registrants in Training Exam, which is the first requirement towards professional registration.

The courses necessary for a major in Geology are as follows:
A. Required Courses

Geology 110 The Face of the Earth with Laboratory
Geology 315 Structural Geology with Laboratory
Geology 330 Geomorphology
Geology 335 Earth Materials
Geology 394 Seminar
Geology 420 Stratigraphy with Laboratory
Geology 425 Sedimentary Petrology and Petrography Geology 450 Hydrogeology
B. Two courses from the following six courses

Geology 120 This Dangerous Earth
Geology 130 Dinosaurs
Geology 220 History of the Earth
Geology 230 Geology of the National Parks
Geology 240 Geology of Natural Resources Geology 250 Geology of the Northern Kentucky Area
C. Two courses from the following six courses

Geology 340 Environmental Geoscience
Geology 341 Soil Science
Geology 402 Invertebrate Paleontology with Laboratory Geology 416 Geologic Field Methods Geology 455 Ground Water Resources Geology 496 Externship

## Bachelor of Arts Geology

The Bachelor of Arts in geology requires 30 semester hours of geology courses, of which at least 15 hours must be numbered 300 or higher.

## The Minor in Geology

A minor in geology consists of 21 hours, of which at least 12 must be at the 300 level or above. A minor in geology, emphasizing courses in environmental geology and hydrogeology is particularly appropriate for students majoring in Environmental Science.

## PHYSICS

## Bachelor's Degree Programs

The degree of Bachelor of Science with a major in physics is designed for those who plan to study physics in graduate school, who wish to pursue another technical field at the graduate level, or who wish to pursue a technical career in industry. The degree of Bachelor of Arts, major in physics, provides a basic core of physics courses and is most appropriate for students pursuing dual majors where the second major may be engineering, mathematics, computer science, or education with an emphasis on physical sciences.

## Bachelor of Science

The Bachelor of Science in physics requires 42 semester hours in physics or astronomy courses. The BS candidate must successfully complete all courses.
A. Required courses:

PHY 220 University Physics with Laboratory I
PHY 222 University Physics with Laboratory II
PHY 224 University Physics with Laboratory III
PHY 300 Intermediate Laboratory
PHY 301 Advanced Laboratory
PHY 310 Dynamics

PHY 360 Thermal Physics
PHY 361 Modern Physics I
PHY 410 Electromagnetic Theory
PHY 460 Quantum Mechanics
PHY 494 Physics Seminar
B. A minimum of 9 additional hours of physics or astronomy courses numbered above 300.
Students majoring in physics are urged to participate in PHY 392 or PHY 492 independent research or PHY 397 Special Projects. Those who are planning to pursue graduate studies are recommended to include PHY 330 Mathematical Physics and PHY 420 Modern Physics II as their electives.

Additional Courses Required:
MAT 129 and 229 or MAT 128, 227 and 228 and MAT 329 and 325; CHE 120/120L, and CHE 121/121L.

At least one year of foreign language is strongly recommended for B.S. candidates.

## Bachelor of Arts Physics

The degree of Bachelor of Arts in physics requires 33 semester hours of physics or astronomy courses. The BA candidate must successfully complete the following courses.
A. Required Courses

PHY 220 University Physics with Laboratory I
PHY 222 University Physics with Laboratory II
PHY 224 University Physics with Laboratory III
PHY 300 Intermediate Laboratory
PHY 310 Dynamics
PHY 360 Thermal Physics
PHY 361 Modern Physics I
PHY 494 Physics Seminar
B. A minimum of 9 additional semester hours of physics or astronomy courses numbered above 300 must be included.
Students majoring in physics are urged to participate in PHY 392 or PHY 492 Independent Research or PHY 397 Special Projects.

Additional Courses Required:
MAT 129 and 229 or MAT 128, 227 and 228 and MAT 329 and 325; CHE 120/120L, CHE 121/121L.
At least one year of foreign language is strongly recommended for pre-engineering and BA candidates.

## The Minor in Physics

The minor in physics requires 21 semester hours of physics and astronomy. Students minoring in physics must complete one of the following sequences in physics: PHY 211 and PHY 213; or PHY 220, PHY 222 and PHY 224. A minimum of 3 additional semester hours of physics or astronomy courses numbered above 300 must be included.

## First-Year Courses for Physics Majors and Pre-Engineering Students:

After consultation with an academic advisor, a physics or pre-engineering student will select first year courses based on whether course prerequisites have been met and whether a pre-engineering option has been determined. Generally, first year courses for physics majors and pre-engineering students will include the following:

|  | 1st Semester <br> Credit Hours | 2nd Semester <br> Credit Hours |
| :--- | :---: | :---: |
| PHY 100 Science, Engineering and Design | 1 |  |
| SPE 101 Principles of Speech Communication | 3 |  |
| ENG 101 College Writing | 3 |  |
| MAT 129 Calculus I or MAT 128Calculus A or <br> other appropriate math course* | $4(3)$ |  |


| PHY 220 University Physics with Laboratory I* <br> $*$ | 4 |  |
| :--- | :---: | :---: |
| INF 120 Elementary Programming or INF 260/ <br> 260L <br> Object Orientated Programming I or <br> EGT 212 Computer Aided Drafting and <br> Design*** |  | 3 (4) |
| PHY 224 University Physics with Laboratory <br> II** |  | 4 |
| MAT 229 Calculus 2 or MAT 227 Calculus B or <br> other appropriate math course* |  |  |
| General Education Elective |  |  |
| *Appropriate math course is determined based on <br> the student's ACT MAT score, in consultation <br> with the student's advisor. |  |  |
| **Students who cannot take calculus in the fall semester should normally take a <br> general education elective instead of PHY 220 in the fall and PHY 220 instead of <br> PHY 224 in the spring semester. Specific recommendations should be determined <br> in consultation with the student's advisor. |  |  |
| ***EGT 212 is recommended for pre-engineers. Consult with an academic advisor <br> to verify transfer equivalency of EGT 212 or to determine the appropriate pro- <br> gramming course. A student may elect to take a general education course instead <br> of EGT 212 or a programming course. |  |  |

## Physics Research Opportunities and Resources

Undergraduate students (physics majors and other related majors) have the opportunity to participate in research with physics faculty in the department. In recent years physics faculty have supervised student research in computational physics, optical sciences, material science, geophysics, gravitation and relativity, astrophysics, and particle physics..

The physics program has 2700 square feet of research lab space. This includes a machine shop and six research labs: Computational Research Lab, X-ray Diffraction Lab, Radioisotope Lab, Material Science Lab, Optical Sciences Lab, and Particle/Astrophysics Lab. In support of this research, the physics program is equipped with a super computer (parallel processing), a Mossbauer spectrometer, vacuum systems, a modulated differential calorimeter, wide bandwidth digital and analog oscilloscopes, CAMAC data acquisition equipment, high speed NIM electronics, air supported optics tables, UVNIR Spectroradiometers, laser Raman spectrometer and an x-ray diffractometer.

## Pre-Engineering

Engineering has traditionally been associated with the physical sciences, given its special emphasis on application of what we know about the world. Engineers are constantly at work seeking to understand the laws of the physical universe, to take advantage of the beneficial aspects of nature, and to convert or modify the adverse factors of nature in order to improve the plight of human beings as well as that of the world itself. Simply put, engineering is systematic problem solving.

Although Northern Kentucky University does not have a college of engineering, students have a variety of options for pursuing a career in engineering. Any of these options provides the opportunity for the student to earn an ABET accredited degree in engineering. This degree in engineering qualifies the graduate to take the Fundamentals of Engineering examination which is the first step towards registration as a Professional Engineer. While at NKU, pre-engineering students are required to consult with an academic advisor in the Department of Physics and Geology prior to registration every semester. Generally, first year courses for the preengineering students will closely match those taken by physics majors (see above). Characteristics of the program follow.

## Engineering Options

Engineering options offered through NKU include Pre-engineering Two + Two Transfer Programs (no NKU degree is granted), Three-Two Dual Degree Programs (an NKU degree is granted), and a Physics Bachelor's followed by a Graduate Degree (MS or PhD) in engineering. The program that best fits an individual student depends on her or his specific
career goals, and the student is encouraged to seek advice and assistance from their advisor, other physics faculty, and the Director of Pre-Engineering.

## Pre-Engineering Two + Two Transfer Program

This option is for pre-engineering students who are certain of their interest in a specific field of engineering and who intend to follow closely the specific course requirements of another institution such as UK. After completing approximately two years at NKU, a student can elect to transfer to college having ABET accredited engineering degree programs to pursue a BS in engineering from that institution. Usually under this option, the NKU pre-engineering student completes the degree in the same time frame as those students who attend the engineering college starting as freshmen. The department's Director of Pre-Engineering is available to advise students on courses for specific engineering fields and their transfer equivalency at various institutions.

## Three-Two Dual Degree Programs

These programs involve specific articulation agreements between NKU and colleges of engineering, resulting in easy and predictable transfer of credit and receipt of degrees from both institutions. Current three/ two programs follow.

## BA or BS in Physics/BS in Engineering (University of Kentucky)

Northern Kentucky University, in cooperation with the University of Kentucky, offers students the opportunity to pursue a degree in biosystems/agricultural chemical, civil, computer, electrical, mechanical, materials, or mining engineering. After completing three years at NKU, the student transfers to UK (with course credit) to complete an additional two years (or more depending on cooperative education options) in one of UK's engineering programs. Normally students will complete the remaining NKU degree requirements during their first year at UK. Afterwards a student is awarded two degrees: a bachelor's degree in physics from NKU and one of the BS degrees in engineering at UK.

## BA or BS in Physics/MS in Engineering (University of Louisville)

Northern Kentucky University has similar transfer articulation agreements with the Speed Scientific School of the University of Louisville. After the student completes three years of work as an undergraduate at NKU, the student transfers to UL (with course credit) to complete a Master of Engineering degree in chemical, civil/environmental, electrical, computer, industrial, or mechanical engineering. The UL program has a mandatory cooperative education component.

## Physics Bachelor's Degree/Graduate Degree in Engineering

This option is for pre-engineering students who prefer to complete a degree in four years while here at NKU with the flexibility after graduation of pursuing either employment or a graduate degree in physics or engineering. Almost all graduate engineering programs admit qualified students with bachelor degrees in physics provided students complete certain undergraduate engineering courses in their early semesters of graduate work.

## Teacher Education in Physics and Geology

Changes in the Kentucky Department of Education standards have resulted in new degree programs for students interested in teaching physical science at the secondary level. Programs are now available that prepare students for certification in secondary chemistry (refer to the Chemistry listing in this catalog), physics, or earth and space science.

## Earth and Space Science for Secondary Education

Preparation for certification to teach earth and space science at the secondary level requires completion of the B.A. in Geology plus 11 hours of astronomy courses. Detailed program requirements can be found under Secondary Education 8-12 in the College of Education and Human Services section of this catalog. Students interested in this program should declare a major in geology and consult with the Chair of the Department
of Physics and Geology and the Coordinator for Admissions and Advising in the College of Education.

## Physics for Secondary Education

Preparation for certification to teach physics at the secondary level requires completion of the B.A. in physics (degree requirements above). Detailed program requirements can be found under Secondary Education 8-12 in the College of Education and Human Services section of this catalog. Students interested in the program should contact the Chair of the Department of Physics and Geology and the Coordinator for Admissions and Advising in the College of Education.

## ENGINEERING TECHNOLOGY

Mechanical and Manufacturing Engineering Technology (MMET)

This bachelor's degree program is designed to provide students with the knowledge and skills needed to succeed in today's industrialized society. Modern industrial societies are centered on the successful production, distribution, and utilization of mechanized devices and techniques. Robust design methods are pivotal in the manufacturability, performance, and economic feasibility of these devices. Together with study of the basic engineering principles, design is the cornerstone of the Mechanical and Manufacturing Engineering Technology program. Mechanical and Manufacturing Engineering Technology focuses on the relationship between design and performance of parts and products. It also focuses on different manufacturing methods and practices vital in the production of high-quality devices.

The MMET program is in the process of reaccreditation by the Technology Accreditation Commission, ABET Inc., 111 Market Place, Suite 1050, Baltimore, MD.

Mechanical and manufacturing engineering technology graduates will be prepared to create efficient solutions to problems in design, material applications, processes analysis, computer applications, quality assurance, quality control, product testing and analysis, automated fabrication and assembling, and the management of production.

Support Requirements (*will also fulfill General Education Program Requirements)

| CHE 120 AND 120L General Chemistry I* | 3 |
| :--- | :--- |
| MAT 119 Pre-calculus Mathematics* | 3 |
| MAT 129 Calculus A | 3 |
| MAT 227 Calculus B | 3 |
| STA 205 Introduction to Statistical Methods | 3 |
| PHY 211 General Physics with Laboratory I | 5 |
| PHY 213 General Physics with Laboratory II | 5 |
| INF 120 Elementary Programming | 3 |

MMET Core Requirements
EGT 116 Intro to Industrial Materials and Processes
EGT 161 IDC Circuit Analysis
EGT 211 Quality Control
EGT 212 Computer Aided Drafting and Design
EGT 261 Engineering Materials
EGT 265 Manufacturing Processes and Operations
EGT 300 Statics and Strength of Materials
EGT 301 Cooperative Education in Engineering. Technology
EGT 310 Project Management and Problem Solving in Technology
EGT 318 Intro to Nano-Technology
EGT 320 Robotic Systems and Material Handling
EGT 340 Applied Dynamics
EGT 361 Fluid Power
EGT 365 Tool Design \& Computer Numerical Control
EGT 380 Machine Design
EGT 417 Senior Research \& Design in Engineering Technology

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EGT 423 Planning \& Design of Industrial Facilities 3
EGT 450 Thermodynamics and Heat Transfer
EGT 465 Automated Manufacturing Systems
Select one of the following three pairs of courses:
Metrology Metrology
EGT 386 Electro-Mech Instrumentation \& Control
EGT 405 Metrology and Geometric Tolerancing
Design:
EGT 412 Advanced CADD
EGT 426 Applied Finite Element Modeling
Quality:
EGT 321 Productivity Management, Scheduling and Planning
EGT 341 Integrated Resource Management
Students interested in obtaining an APICX (1) or an ASQ (American Society for Quality) (2) certificate should take

EGT 260, EGT 321, and EGT 341
LDR 308 Leadership in Quality Environment
EGT 411 Quality Assurance and Auditing
All University requirements including general education must be met for graduation.

## Manufacturing Processes Certificate Program

This program provides hands-on expertise in manufacturing processes, enabling individuals to perform material processing tasks and achieve higher levels of performance to advance in their industrial professions. Manufacturing Process Certificate is a component of the Mechanical \& Manufacturing Engineering Technology B.S. degree program. It is designed to meet the industrial workforce development needs in the Greater Cincinnati area. Completion of the following 21 semester hours is required for this certificate program.

```
EGT }116\mathrm{ Introduction to Industrial Material/Processes 3
MAT 119 Pre Calculus
3
EGT 161 Industrial Electricity & Electronics 3
EGT 212 Computer Aided Drafting & Design 3
EGT }265\mathrm{ Manufacturing Processes and Operations 3
EGT 365 Tool Design & Computer Numerical
    Control
    3
EGT 412 Advanced CAD 3
```

Certification Program in Automated Manufacturing Processes and Systems

Mazak Corporation and Northern Kentucky University have formed a partnership that serves as a model of industrial/educational cooperation. This program opens new manufacturing career opportunities to Northern Kentucky students. This collaboration teams NKU faculty members with the trainers and facilities of Mazak's Industrial Manufacturing Laboratory.

NKU has created collaborative arrangements with business and industries in the Northern Kentucky and greater Cincinnati area. The NKU faculty is committed to quality education and training needed by individuals to function effectively in a technological environment.

Mazak Corporation is committed to serve as a model corporate citizen -- supporting programs that advance the manufacturing industry and improve the learning environment for manufacturing students.

Course Requirements for the Certification Program in Automated Manufacturing Processes and Systems

## NKU campus Courses ( 9 credits)

EGT 161 Industrial Electricity and Electronics 3
EGT 212 Computer Aided Drafting and Design 3
EGT 265 Manufacturing Processes and Operations 3

## Mazak-based Courses (12 Credits)

EGT 320 Robotic Systems and Material Handling* 3
EGT 301 Cooperative Education in Engineering Technology* 3
EGT 386 Electromechanical Instrumentation and Control* 3
EGT 365 Tool Design \& Computer Numerical Control* 3
*These courses will be designed and team-taught by NKU staff and Mazak assigned personnel. All courses can be applied to the NKU MMET Bachelor's degree.

## Technological Leadership and Innovation Certificate (21 Credits)

EGT 211 Quality Control 3
EGT 318 Introduction to Nano-Technology 3
EGT 321 Productivity Management, Scheduling \& Planning 3
ENTP 300 New Venture Creation 3
ENTP 333 New Venture Management 3
LDR 305 Human Relations in Organizations 3
LDR 308 Leadership in Organizations 3

## ELECTRONICS ENGINEERING TECHNOLOGY (EET)

This accredited program* is designed to prepare graduates for both technological and managerial responsibilities in industry. The electronics engineering technologist can provide direct technical assistance to scientists and engineers. Hands-on education coupled with strong development of analysis and design skills sets apart the Electronics Engineering Technology program.

Graduates gain skills to analyze, design, apply, and troubleshoot systems with electronic, digital, analog, microcontroller, software, and mechanical components. The combination of practical and theoretical education lead to graduates with diverse technical skills throughout a wide range of applications. Students select courses from a Technology Options group for additional education in computer science, applied technical science, or a combination of the two disciplines.

Support Requirements (29 semester hours)
CHE 120 General Chemistry 3
CHE 120L General Chemistry Lab 1
INF 120 Elementary Programming 3
MAT 119 Pre-calculus Mathematics 3
MAT 128 Calculus A 3
MAT 229 Calculus B 3
STA 205 Statistics 3
PHY 211 General Physics with Laboratory I 5
PHY 213 General Physics with Laboratory II 5
Core Requirements (45 semester hours)
EGT 161 DC Circuit Analysis
3
EGT 261 Engineering Materials 3
EGT 300 Statics and Strengths of Materials 3
EGT 301 Cooperative Education in Technology 3
EGT 310 Project Management and
Problem Solving in Technology 3
EGT 343 A.C. Circuit Analysis 3
EGT 344 Analgo Electronics 3
EGT 404 Signals and Systems 3
EGT 406 Industrial Electronics 3
EGT 417 Senior Research \& Design in Engineering Technology 3
EGT 345 Digital Electronics 3
EGT 367 Microprocessors 3
EGT 448 Network Hardware 3
EGT 467 Advanced Microprocessors 3
Select any four courses from the following:
INF 260 Programming I
3
INF 260L Programming Lab 1
CSC 360 Computer Programming II 3

CSC 362 Computer Systems 3
CSC 462 Computer Architecture 3
EGT 318 Introduction to Nano-Technology 3
EGT 340 Applied Dynamics 3
EGT 361 Fluid Power 3
EDT 450 Thermodynamics and Heat Transfer 3
Total Semester Hours in Program

All University requirements including general education must be met for graduation.

* The EET program is accredited by the Technology Accreditation Commission, ABET Inc., 111 Market Place, Suite 1050, Baltimore, MD 20202-4012; phone 410-347-7700.

Electronics Technology Minor (21 semester hours
See program advisor for requirements.

## Political Science and

## Criminal Justice Department

## FACULTY

Shamima Ahmed, MPA director
Michael Baranowski, political science coordinator
Linda Dolive, international studies coordinator
Julie C. Kunselman, chair
Melissa Moon, criminal justice coordinator
Liza Benham, Jayce Farmer, Clinton G. Hewan, Edward Kwon, Gary Mattson, Bruce McClure, Danielle McDonald, Alexis Miller, Julie Olberding, Adalberto J. Pinelo, Julie Raines, Ryan Teten, Kimberly Weir

## CONTACTING THE DEPARTMENT

The Department of Political Science and Criminal Justice is located in FH 436 and may be reached during business hours by phone at 859-572-5321 or 859-572-5322. You can also visit the department's website at http://www.nku.edu/~psc.

Julie Kunselman, chair kunselmanj1@nku.edu

## POLITICAL SCIENCE AND CRIMINAL JUSTICE PROGRAMS

## Associate Degree

Criminal Justice

## Bachelor of Science

Political Science

## Bachelor of Arts

Criminal Justice
International Studies
Political Science

## Undergraduate Certificate

Civic Engagement

## GENERAL EDUCATION COURSES OFFERED

JUS 101 Introduction to Criminal Justice
JUS 231 Race, Gender, and Crime
PSC 100 American Politics
PSC 100H Honors American Politics
PSC 101 State and Local Politics
PSC 102 Comparative Politics
PSC 103 International Politics
PSC 110 History of Western Political Thought
PSC 111 History of American Political Thought
PSC 215 Race, Gender, and Politics
PSC 291W Writing in Political Science

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

To declare a major in political science, criminal justice, or international studies, students must have earned a GPA of at least 2.50 in prior college coursework. First-semester students who wish to declare a major in one of the above programs must have an ACT composite score of at least 21 or SAT of 990 . Transfer students who wish to declare a major in one of the programs must have earned a GPA of at least 2.50 in prior college coursework. Approval from the chair may substitute in all cases.

## MISSION

Our diverse faculty provide NKU teaching, scholarship, and service through six guiding principles:

- Provide quality instruction that fosters critical thinking and oral as well as written communication abilities.
- Develop informed citizens who participate in regional, national and global affairs.
- Prepare students for a variety of careers through a wide range of academic courses.
- Promote traditional as well as applied scholarship in a variety of disciplines.
- Serve NKU through a rich tradition of collegial governance participation and university leadership.
- Provide meaningful civic engagement to NKU, the local community and constituents well beyond our borders.


## POLITICAL SCIENCE

The faculty of Political Science promote a comprehensive understanding of politics-a process by which benefits and burdens are given out through public means. It does so by acquainting students with literature of the discipline in four areas of specialization (American politics, comparative politics, international politics, and theory/practice) and by equipping students with methodological tools necessary for sound and critical analysis of political institutions of behavior and of processes by which public policy is formed. The faculty also seek to engage students in a partnership of research and other scholarly endeavors and in service to the community. More specifically, the faculty provide

1. courses to comprise both a major and minor in political science;
2. courses that satisfy part of the general education requirements;
3. preparation for graduate and professional schools, particularly law school;
4. support courses for a variety of interdisciplinary programs such as environmental studies, international studies, Latin American studies, legal studies, and women's studies;
5. courses that provide background for careers in business, public service in government or international agencies, and teaching.

## BACHELOR'S DEGREE PROGRAMS

## Political Science (Bachelor of Arts)

The major in political science (BA) consists of 39 semester hours. There are 15 hours of core required classes and 24 hours of area requirements.

1. PSC 100 or PSC 101.
2. PSC 102, 103, 110, and 315.

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3. Twenty-four semester hours of upper-division coursework from the areas listed below. A minimum of one course is to be chosen from each area.
a. American Government (PSC 302, 303, 304, 305, 307, 308, 309, 310, 311, 320, 394, 403*, 415**, 430, 496).
b. International Politics (PSC 338, 394, 410, 415**, 420, 470, 480, 481, 486, 496).
c. Comparative Politics (PSC 330, 335, 355, 366, 362, 382, 394, 485, 496).
d. Political Theory/Practice (PSC 312, 316, 370, 373, 394, 403*, 496, PAD 300, 412, 455, 475).

* Can be used in either American or Theory/Practice category
** Can be used in either American or International category
A student may substitute one or two reading courses (PSC 499) for courses required in number 3 above. Reading courses are designed primarily for students who have an interest or academic curiosity not satisfied by the existing curriculum but potentially covered by the expertise of the faculty in the department or for graduating seniors who, for reasons beyond their control, are lacking a requirement. Such courses are normally limited to a maximum of 6 semester hours for each student and require the consent of the instructor, the program coordinator, the department chair. An internship may not count as the only course in an area.

Students working toward the Bachelor of Arts in political science are strongly urged to fulfill the general education requirement in mathematics by taking Elementary Statistics (STA 205) and in writing by taking Writing in Political Science (PSC 291W).

The degree of Bachelor of Arts is conferred upon those students completing all requirements for the major in political science and other NKU requirements for the degree.

## Legislative Internship

Students majoring in political science may apply for a legislative internship (PSC 496) in Frankfort, Kentucky, or The Washington Center in Washington, D.C. for one semester. Those accepted will take up to 15 semester hours.

Students majoring or minoring in political science must earn at least a $C$ in each course counted as part of the major or minor.

Anyone pursuing teacher certification must schedule an appointment with the coordinator of certification and advisement in the College of Education at the beginning of the sophomore year.

## Political Science (Bachelor of Science)

The major in political science (BS) consists of 42 semester hours.
The program includes more rigorous quantitative skills than the BA program and is recommended for students considering graduate work in any social science. In addition to all the requirements for the Bachelor of Arts, the Bachelor of Science requires Data Analysis (PSC 316) and Elementary Statistics (STA 205). Students working toward the Bachelor of Science may not use PSC 316 to satisfy the political theory/practice area (3.d above). Students working toward the Bachelor of Science in political science are strongly urged to fulfill the general education requirement in writing by taking Writing in Political Science (PSC 291W).

The degree of Bachelor of Science is conferred upon those students completing the requirements of the program and other NKU requirements for the degree.

## CRIMINAL JUSTICE

## The Major in Criminal Justice

The major in criminal justice consists of 45 semester hours.
The major in criminal justice is a broad criminal justice program that studies the administration of justice and the resolution of conflict within society. More specifically, the major focuses on the three major aspects of the criminal justice system: police, courts, and corrections.

Leading to the degree of Bachelor of Arts, the major consists of a 21semester hour core and 21 semester hours of secondary requirements. Core courses provide a conceptual understanding of criminal justice institutions and processes, theories of crime and punishment, criminal law, and social science research methods.

The program offers a major and minor designed to prepare students for graduate studies and for careers in criminal justice and allied fields. Rather than training individuals for a particular occupation through instruction in specific vocational skills, the program offers a broad, liberal education focused on the cultivation of analytical and creative thought and on the ability to read, write, and speak effectively.

Students majoring or minoring in criminal justice must earn at least a $C$ in each course counted as part of the major or minor. Students may not double-dip between major requirements and area of concentration.
Core Requirements ( 21 semester hours)
JUS 101 Introduction to Criminal Justice 3
JUS 200 Police in America 3
JUS 201 Corrections in America
JUS 203 The Criminal Court System 3
JUS 302 Criminal Law
JUS 315 Criminal Justice Research Methods
JUS 317 Perspectives on Crime
STA 205 Introduction to Statistical Methods or
STA 212 Statistics for Business Applications
Secondary Requirements (21 semester hours)
Students must complete a minimum of 12 hours at 300 level or above

JUS 204 Criminal Investigation
JUS 205 Criminal Evidence
JUS 210 Legal Research
JUS 215 Private Sector Security
JUS 220 Liability and Ethics in Criminal Justice
JUS 231 Race, Gender and Crime
JUS 294 Special Topics
JUS 303 Criminal Procedure
JUS 310 Police Management
JUS 311 Police in the Community
JUS 312 Institutional Corrections
JUS 313 Rights of the Convicted
JUS 318 The African American, the Law and the Courts
JUS 319 Criminal Justice in Film
JUS 320 Advanced Crime Scene Technology \& Criminalistics
JUS 321 Black Women, Crime and Politics
JUS 333 Careers in Criminal Justice
JUS 339 Applied Corrections
JUS 351 Financial Investigations
JUS 400 Juvenile Justice System
JUS 401 Correctional Rehabilitation
JUS 402 Alternatives to Incarceration
JUS 409 Alternative Dispute Resolution
JUS 428 Crime Across the Life Course
JUS 429 Violence Against Women
JUS 430 The Politics of Criminal Justice
JUS 494 Special Topics
JUS 496 Criminal Justice Internship
PSC 304 Introduction to the Law
PSC 305 The Judicial Process
PAD 412 Administrative Law
SOC 202 Juvenile Delinquency
SOC 305 Criminology
SOC 350 Women and Crime
SOC 357 Sociology of Firearms
SOC 488 Sociology of Law
SOC 455 Comparative Criminal Justice
HSR 212 Crises Intervention
PHI 330 Philosophy of Law

## The Major in International Studies

See "Interdisciplinary Studies" on page 101 of this catalog.

## ASSOCIATE DEGREE IN CRIMINAL JUSTICE

The Associate Degree in criminal justice consists of 66-68 semester hours.

The Associate Degree in criminal justice promotes student understanding of the three major aspects of the criminal justice system: police, courts, and corrections. The program seeks to prepare students for pursuing a bachelor's degree and/or careers in criminal justice and allied fields. Rather than training individuals for a particular occupation through instruction in specific vocational skills, the program offers a broad, liberal education focused on the acquisition of substantive knowledge, the cultivation of analytical and creative thought, and the ability to read, write, and speak effectively.

Students in the Associate Degree program in criminal justice must earn at least a $C$ in each course to be counted as part of the program.

## First Year

First semester ( 15 semester hours)
JUS 101 Introduction to Criminal Justice 3
ENG 101 College Writing 3
PSC 100 American Politics (or PSC 101 State and Local Politics)
PSY 100 Introduction to Psychology 3
SOC 100 Introduction to Sociology
Total
Second semester (15-16 semester hours)
JUS 200 Police in America
JUS 201 Corrections in America 3
JUS 203 The Criminal Court System 3
SPE 101 Principles of Speech Communication 3
General education natural science requirement from
approved list
Second Year
First semester (18 semester hours)
JUS 231 Race, Gender, and Crime
ENG 291 Advanced Writing
Three courses from list of criminal justice electives
General education humanities/fine arts requirement from approved list
Second semester (18-19 semester hours)
One course from list of criminal justice electives
General education mathematics requirement
from approved list
3(4)
Twelve hours of free electives 12

## Criminal Justice Electives

JUS 204 Criminal Investigation
JUS 205 Criminal Evidence
JUS 210 Legal Research
JUS 215 Private Sector Security
JUS 220 Ethics and Liability in Criminal Justice
JUS 294 Special Topics
HSR 212 Crises Intervention
SOC 202 Juvenile Delinquency
Students may take 300- or 400-level courses with consent of instructor

## MINORS

## The Minor in Criminalistics for the Biology or Chemistry Major

The minor in Criminalistics is recommended for students majoring in either Biology or Chemistry with a forensic track. This minor is offered by NKU's criminal justice faculty. The program will provide students
with an understanding of the significant role science is accorded in the criminal justice system especially in criminal investigations and criminal trials. Students minoring in this criminalistics program must earn at least a grade of $C$ in each course counted as part of the minor.

## Core Requirements (21 hours)

JUS 101 Introduction to Criminal Justice
JUS 204 Criminal Investigation
JUS 205 Criminal Evidence
JUS 231 Race, Gender and Crime
JUS 303 Criminal Procedure
JUS 320 Advanced Crime Science Technology and Criminalistics
JUS 494 Special Topics: Courtroom Testimony

## The Minor in Criminal Justice

Students minoring in criminal justice ( 21 semester hours) complete a 12 semester-hour core and 9 semester hours of secondary requirements. Students minoring in criminal justice must earn at least a $C$ in each course counted as part of the minor.

## Core Requirements (12 hours)

JUS 101 Introduction to Criminal Justice
JUS 200 Police in America
JUS 201 Corrections in America
JUS 203 The Criminal Court System
Secondary Requirements ( 9 hours at the 300 -level or above)
JUS 302 Criminal Law
JUS 303 Criminal Procedure
JUS 310 Police Management
JUS 311 Police in the Community
JUS 312 Institutional Corrections
JUS 313 Rights of the Convicted
JUS 315 Criminal Justice Research Methods
JUS 317 Perspectives on Crime
JUS 319 Criminal Justice in Film
JUS 320 Advanced Crime Scene Technology \& Criminalistics
JUS 321 Black Women, Crime and Politics
JUS 333 Careers in Criminal Justice
JUS 339 Applied Corrections
JUS 351 Financial Investigations
JUS 400 Juvenile Justice System
JUS 401 Correctional Rehabilitation
JUS 402 Alternatives to Incarceration
JUS 409 Alternative Dispute Resolution
JUS 428 Crime Across the Life Course
JUS 429 Violence Against Women
JUS 430 The Politics of Criminal Justice
JUS 494 Special Topics
JUS 496 Criminal Justice Internship
PAD 412 Administrative Law
PHI 330 Philosophy and Law
PSC 304 Introduction to Law
PSC 305 The Judicial Process
PSC 315 Scope and Methods
SOC 305 Criminology
SOC 350 Women and Crime
SOC 455 Comparative Criminal Justice
SOC 357 Sociology of Firearms
SOC 488 Sociology of Law

## The Minor in International Studies

See requirements under "International Studies" on page 101 of this catalog.

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## The Minor in Latin American Studies

See requirements under "Latin American and Caribbean Studies" on page 102 of this catalog

## The Minor in Pre Law

See requirements under "Pre Law" on page 102 of this catalog.

## The Minor in Political Science

The minor in political science consists of PSC 100, 102, and 103 and 12 semester hours of upper-level courses in political science. Students minoring in political science must earn at least a $C$ in each course counted as part of the major or minor.

The Minor in Public Administration (15 semester hours)<br>PAD 300 Introduction to Public Administration<br>PAD 401 Human Resource Management<br>PAD 411 Budgeting Technology and Applications<br>Any two of the following courses:<br>PSC 403 Public Policy Analysis<br>PAD 412 Administrative Law<br>PAD 420 Managing the Not-for-Profit Organization<br>PAD 455 Urban Administration<br>PAD 460 Planning and Community Development<br>PAD 494 Topics: Public Administration<br>PAD 496 Internship: Public Administration

## The Certificate in Civic Engagement

The Certificate in Civic Engagement offers students an opportunity to intentionally connect their academic learning with service learning in the community. A 16 -credit certificate, this undergraduate certificate includes two required courses (4 credits total) and four self-selected service learning courses (12 credits total).

The goal of this program is to help students see that regardless of their academic, personal and professional interests, there are services that they can do to help benefit our community. Through this Undergraduate Certificate Program, students will be exposed to and immersed in opportunities to create change through their knowledge and experiences, and which are grounded in their academic program.

Completion of this certificate will compliment any degree that students are completing at NKU. This certificate may make them more marketable for work with nonprofit agencies, schools, government agencies, and other organizations that work directly with the community.

## Requirements (16 credits)

PSC-CIV 100: A 1-credit introductory course.
Any four (4) 3-credit service learning courses assigned as required service learning "RSL" or optional service learning "OSL" designator by NKU class registration system as per the following designator checklist: Students (a) participate in an organized service activity that meets a community need and (b) reflect upon their service activity as a means of gaining a deeper understanding of course content; (c) link the service experiences to academic course learning objectives; and (d) are assessed on learning that occurs as a result of the course and service learning experience.
PSC-CIV 499: A 3-credit civic engagement capstone course.

## THE AREA OF CONCENTRATION IN PRE-LAW

Students considering law careers may choose a legal studies minor or may simply wish to fulfill their requirement for an Area of Concentration by taking four upper-division political science law courses. Since upper-division political science courses have a prerequisite of 3 semester hours of lower-division political science work, it is suggested that students taking this concentration satisfy this prerequisite by taking American Politics (PSC100). The suggested course of study is as follows:

PSC 304 Introduction to the Law
PSC 305 The Judicial Process
PSC 307 Constitutional Law
PSC 308 Civil Liberties
It should be noted that undergraduate "law" courses should not be taken for the purpose of learning the "law" and certainly are not necessary for law school admission. Such courses may well be helpful, however, in providing an understanding of the place of the law in society and a better basis for students to estimate their potential interest in law school.

## Psychology

## Department

## FACULTY

## Perilou Goddard, chair

Bill Attenweiler, Mark E. Bardgett, Robin M. Bartlett, Carole A. Beere, Paul D. Bishop, Kimberly H. Breitenbecher, Mei Mei Burr, Kevin Corcoran, Kathleen Fuegen, Heather Hatchett, David E. Hogan, Douglas S. Krull, Angie Lipsitz, George E. Manning, Cecile Marczinski, Cynthia R. McDaniel, Philip J. Moberg, Jeffrey M. Smith, James H. Thomas, Juliann Young

## CONTACTING THE DEPARTMENT

The Department of Psychology is located in BEP 337 and may be reached during business hours by phone at 859-572-5310. Visit the department's website at http://www.nku.edu/~psych.

Dr. Perilou Goddard, chair goddard@nku.edu

## PSYCHOLOGY PROGRAMS

Bachelor of Arts
Psychology

## Bachelor of Science

Psychology

## Minors

Psychology
Neuroscience

## Master of Science

Industrial/Organizational Psychology

## Certificates

Organizational Psychology
Industrial Psychology
Occupational Health Psychology

## GENERAL EDUCATION COURSES OFFERED

PSY 100 Introduction to Psychology
PSY 100H Honors Introduction to Psychology
PSY 200 Psychology of Personal Adjustment
PSY 201 Psychology of Race and Gender
PSY 205 Psychology of Human Sexuality

PSY 206 Human Sexuality Forum
PSY 220 Lifespan Development

## DEPARTMENT POLICIES

## Grade Requirement

Students majoring (or minoring) in psychology must have a grade of $C$ or better in all courses applied toward certification of the major or minor in psychology.

## Computer Literacy Requirement

Students majoring in psychology satisfy the University requirement of competence in computer use by successfully completing PSY 210L Research Tools in Psychology or its equivalent.

## Assessment Testing

All students majoring in psychology are required to participate in departmental assessment testing which is conducted in each student's final full semester prior to graduation.

## Transfer Students

Transfer students obtaining a major or minor in psychology must complete at least half of their required coursework in psychology at NKU.

## FACULTY'S PRIMARY OBJECTIVES

The faculty of Psychology seeks to provide excellence in education through teaching, research, and community involvement and to serve the needs of students for knowledge in the discipline and profession of psychology. An additional goal is to provide a balanced approach emphasizing the teaching, research, and practical application of psychology. To meet these goals, the curriculum provides the following:

1. a strong background to prepare students for careers in mental health facilities, industries, and other occupations that value an undergraduate background in psychology;
2. appropriate preparatory courses for students going on to graduate study;
3. for students majoring in other disciplines, some understanding of psychology and its application to human relations.

## BACHELOR'S DEGREE PROGRAM

The major in psychology consists of a minimum of 43 semester hours and requires completion of the following:

1. Five core courses:

PSY 100 Introduction to Psychology
STA 205 Elementary Statistics
PSY 210 Research Methods in Psychology
PSY 210L Research Tools in Psychology
PSY 210R Career Planning for Psychology Majors
2. Three courses from each of the following course groupings:
a. PSY 309 Psychology of Perception

PSY 311 Biopsychology
PSY 337 Animal Learning
PSY 338 Cognitive Processes
PSY 340 Social Psychology
b. PSY 300 Personality Psychology

PSY 305 Psychological Testing
PSY 319 Child Psychology
PSY 333 Abnormal Psychology
PSY 344 Industrial/Organizational Psychology
3. Five additional courses ( $13-15$ semester hours) in psychology with at least three courses at the 300 level or above.

The psychology major is designed to provide students with flexibility in the selection of courses to meet their individual interests and career goals. Students must meet with a psychology faculty advisor during the first semester following the declaration of psychology as their major to receive assistance in designing a program of coursework based on their individual needs. All students are encouraged to meet with a faculty advisor in subsequent semesters for assistance in career planning and course selections to meet degree requirements. For students planning to pursue graduate study in psychology, the department strongly recommends a broad and balanced program of applied and theoretical courses with careful planning to meet the requirements for admission to graduate schools in psychology. In addition, such students are encouraged to take more than the minimum number of required courses, including advanced courses that involve the opportunity for independent and/or supervised research. The department offers a variety of Special Topics (PSY 494) classes. Recent topics have included Image of Psychology in Film, Drug Policy, Psychology of Religion, Is PowerPoint Evil, and Neuroscience Seminar. Students should consult the Schedule of Classes each semester for information about available special topics classes.

The degree of Bachelor of Science or Bachelor of Arts is conferred upon students completing the major in psychology.

The degree of Bachelor of Science is conferred upon students completing one of the following options: (1) one college-level mathematics or statistics course (in addition to STA 205) plus two laboratory courses in psychology or (2) two statistics courses (beyond STA 205) from STA 312, STA 314, and STA 315 plus one laboratory course in psychology.

The Bachelor of Arts is conferred upon students completing a minimum of 6 semester hours of a foreign language (two or more courses with the same language prefix) or its equivalent or completing a study abroad course (3 credit hour minimum) approved by the NKU Office of International Programs. This requirement is in addition to the current NKU general education requirement in the humanities area. Students pursuing a psychology degree in conjunction with a secondary education curriculum should review that portion of this catalog relating to education and health/ physical education. Upon deciding to pursue the teacher education program, students must meet with the coordinator of certification and advisement in the College of Education.

## The Minor in Psychology

The minor in psychology consists of 24 semester hours, including Introduction to Psychology (PSY 100 or PSY 100H) and seven additional courses in psychology.

## The Minor in Neuroscience

The minor in neuroscience is interdisciplinary and requires a minimum of 22 semester hours of course work. For program details, see page "NEUROSCIENCE" on page 103 under "Interdisciplinary Studies" of this catalog.

## Sociology, Anthropology, and Philosophy Department

## FACULTY

Dr. Terry Pence, chair
Sharlotte Neely, coordinator, anthropology program and director of native american studies
Joan Ferrante, coordinator, sociology program
Robert Trundle, Jr., coordinator, philosophy and religious studies programs
Barbara Thiel, director, archaeology
Judy Voelker, director, museum of anthropology

## Anthropology

H. Thomas Foster, MaryCarol Hopkins, Douglas W. Hume, Timothy D. Murphy, Sharlotte Neely, Michael J. Simonton, Barbara Thiel, Judy C. Voelker

## Philosophy and Religious Studies

Augustine Yaw Frimpong-Mansoh, Rudy L. Garns, Nancy S. Hancock, Robert B. Kenney, Dennis D. Miller, Terry Pence, Robert Trundle, Jr.,

## Sociology

Barbara A. Arrighi, Joan Ferrante, Yuchi (Boni) Li, J. Robert Lilly, Kristen Yount

## CONTACTING THE DEPARTMENT

The Department of Sociology, Anthropology, and Philosophy is located in LA 217 and may be reached during business hours by phone at 859-572-5259. Visit the department's web sites:

Sociology — http://www.nku.edu/~soc,
Anthropology — http://www.nku.edu/~anthro
Philosophy and Religious Studies — http://www.nku.edu/~philos
Native American Studies — http://www.nku.edu/~anthro/
academic_programs/native_american_studies_minor.htm
Museum of Anthropology — http://www.nku.edu/~anthro/nkuanthro museum

Terry Pence, chair pence@nku.edu

## SOCIOLOGY, ANTHROPOLOGY, AND PHILOSOPHY PROGRAMS <br> Majors

Anthropology
Philosophy
Sociology
Minors
Anthropology
Archaeology
Native American Studies
Philosophy
Applied Philosophy
Religious Studies
Sociology

## GENERAL EDUCATION COURSES OFFERED

ANT 100 Cultural Anthropology
ANT 110 Introduction to Archaeology
ANT 201 World Cultures
ANT 230 North American Indians

ANT 231 Modern American Indians
ANT 240 Peoples of Africa
ANT 245 Peoples of Latin America
ANT 270 Native Australia and Oceania
ANT 273 Race, Gender and Culture
ANT 294 Topics: Studies in Anthropology
ANT 310 African Arts
PHI 150 Introduction to Philosophy
PHI 155 Introduction to Ethics
PHI 160 World Religions
PHI 165 Introduction to Logic
PHI 170 Philosophy and Sexuality
PHI 180 History of Classical and Medieval Philosophy
PHI 185 History of Modern and Contemporary Philosophy
PHI 201 Ideas in Philosophy
PHI 210 Ethics of Information Technology
PHI 220 Health Care Ethics
PHI 240 Philosophy and the Arts
PHI 250 Eastern Philosophy
PHI 322 Philosophy of Race
PHI 324 Africana Philosophy
PHI 330 Philosophy of Law
PHI 350 Philosophy of Religion
REL 181 Survey of the Hebrew Bible (Old Testament)
REL 182 Survey of the New Testament
REL 185 Survey of Christianity
REL 186 Introduction to Judaism
REL 201 Ideas in Religious Studies
REL 325 African American Religious Experience in America
REL 370 Religion and Science
SOC 100 Introductory Sociology
SOC 110 Introduction to Race and Gender
SOC 205 Current Social Issues
SOC 210 Analysis of Racism and Sexism in the United States
SOC 240 Peoples of Africa
SOC 245 Latin American Societies

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

None

## DEPARTMENT POLICIES

## Assessment

All graduating seniors in sociology, anthropology, and philosophy are required to take part in their discipline's assessment program during the semester prior to graduation. The results will be used by the department faculty to determine how the department's major programs of study and curricula are serving students and the programs' goals. Students who do not participate in the assessment will not be allowed to graduate unless prior approval has been obtained from the department chair.

## SOCIOLOGY, ANTHROPOLOGY, AND PHILOSOPHY

Study in these areas serves a two-fold purpose. First, it contributes to the general education of students by increasing their insight into human institutions, behaviors, and beliefs. Second, it provides students with preparation applicable to a variety of occupations or to graduate work. Specific course requirements for each program are described below.

## SOCIOLOGY

The primary mission of the sociology program is to provide undergraduate students with an understanding of concepts and methods of the scientific study of society and social relations. Sociology is both a perspective, a way of viewing society, and a set of techniques for seeking answers to questions about social behavior; courses are designed to acquaint students with both aspects of the discipline. The program seeks to develop students' ability to observe and think critically about their own
and other societies and to become more sensitive to behavioral and value differences among peoples.

The program offers a major in sociology leading to the degree of Bachelor of Science. A minor in sociology is also offered. SOC 100, 110, 205,210 , and 245 may be used to satisfy the general education requirement in behavioral sciences, and other sociology courses serve as components of interdisciplinary programs and majors in other programs. Sociology courses are core components of the applied program in sociology and anthropology.

## Bachelor's Degree Program

The major in sociology requires the successful completion of 39 semester hours in the discipline, 18 of which must be at the 300 or 400 level. The curriculum consists of five categories of courses. Students majoring in sociology are required to complete all courses in category 1 (core courses) and at least one course from each of the remaining categories. Together, these comprise 24 semester hours; the remaining 15 semester hours are to be chosen as sociology electives. A grade of at least a $C$ must be earned in the core courses, and a grade point average of at least 2.00 must be earned in all courses that comprise the major.

1. Core Courses (12 semester hours)

SOC 100 Introductory Sociology
SOC 320 Social Research
SOC 330 Sociological Theory
SOC 494 Senior Seminar
2. Social Institutions (minimum of 3 semester hours)

SOC 203 Sociology of Corrections
SOC 208 Police and Society
SOC 308 Social Organization
SOC 315 Marriage and the Family
SOC 355 Sociology of the Environment
SOC 430 Sociology of Religion
SOC 450 Medical Sociology
SOC 488 Sociology of Law
SOC 520 Sociology of Education
3. Power and Inequality (minimum of 3 semester hours)

SOC 300 Race and Ethnic Relations
SOC 301 World Patterns of Race and Ethnicity
SOC 307 Social Stratification
SOC 335 Popular Culture
SOC 364 Women and Men in Society
SOC 425 Political Sociology
4. People, Places, and the Life Cycle (minimum of 3 semester hours)

SOC 202 Juvenile Delinquency
SOC 213 Sociology of Aging
SOC 245 Latin American Societies
SOC 303 Social Psychology
SOC 318 Sociology of Work and Occupations
SOC 340 Population
SOC 400 Urban Society
5. Social Issues and Social Change (minimum of 3 semester hours)

SOC 205 Current Social Issues
SOC 305 Criminology
SOC 332 Collective Behavior
SOC 350 Women and Crime
SOC 357 Guns and Society
SOC 360 Technology and Social Change
SOC 380 Elite Deviance
SOC 381 Deviance and Social Control
SOC 420 Community Corrections
All students majoring in sociology are required to prepare a portfolio for SOC 494 (Senior Seminar). The table of contents will specify the title of each entry and the course for which the assignment was written. The portfolio must include a letter discussing its contents. The contents
must include five assignments that, when taken together, demonstrate that the student has

1. understood the classical theoretical perspectives in sociology;
2. analyzed an issue with a sociological framework (theory, concept, and/or perspective);
3. articulated a meaningful research question, specified a design, and collected relevant data to answer that question;
4. explored an issue related to socio-cultural diversity;
5. understood conceptually the statistical analysis of sociological data.

## Focus on Criminology

The program in sociology offers a variety of courses for students interested in careers as court administrators, criminal justice administrators, criminal justice research administrators, social service professionals, police officers, corrections officers, probation and parole officers, juvenile caseworkers, or substance abuse counselors. Suggested courses for a major in sociology with a criminology focus are the following:

SOC 202 Juvenile Delinquency
SOC 203 Sociology of Corrections
SOC 208 Police and Society
SOC 305 Criminology
SOC 350 Women and Crime
SOC 357 Guns and Society
SOC 380 Elite Deviance
SOC 381 Deviance and Social Control
SOC 420 Community Corrections: Probation and Parole
SOC 455 Comparative Criminal Justice
SOC 488 Sociology of Law

## Focus on Society, Environment, and Technology

The roles of behavior, culture, and social organization are central to the study of human technology and environment and of their interrelationships. Students majoring in sociology who have particular interest in issues and problems of the relationships of socio-cultural factors and technology and environment should consider selecting courses addressing those specific concerns. The focus area, in combining sociology and anthropology, prepares students for close examination of factors associated with issues such as global ecological problems, the role of technology in social and cultural change, and resource utilization and management, among others. Suggested courses are the following:

ANT 345 Environmental Anthropology
SOC 340 Population
SOC 355 Sociology of the Environment
SOC 360 Technology and Social Change
SOC 340, 355, and 360 may be used to satisfy existing requirements of the major in sociology. With the recommendation of the student's advisor and approval by the department chair, the 3 semester hours in anthropology may be applied to fulfilling the requirements for the bachelor's degree in sociology.

## The Minor in Sociology

The sociology minor is 22 semester hours in the discipline. The core sequence (SOC 100, 320, and 330) is required with minimum grades of $C$. The remaining 12 semester hours may be taken from any sociology courses. An overall grade point average of at least 2.00 is required in courses comprising the minor.

## ANTHROPOLOGY

Anthropology is the investigation of humankind's past and present. Specifically, it includes the subfields of cultural anthropology (study of the great variety of societies and cultures in the world today); archaeology (study of past societies and cultures); physical anthropology (study of the origin and biological nature of humans); anthropological linguistics (study of language and its relationship to culture); and applied anthropol-

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ogy (the use of anthropological knowledge to help solve practically oriented problems). Through these subfields, anthropology explains differences and similarities among all human groups, at all times, and in all places.

Courses in anthropology are designed to provide students with an appreciation and broadened view of the diversity of past and present human cultures and an understanding of the origin and biological nature of people and their near relatives. The anthropology program, through its major and minor options, (1) prepares students for a variety of career opportunities depending on individual student interest and coursework, (2) prepares students to do graduate work in anthropology, and (3) provides a complementary program of study for students majoring or minoring in other social and behavioral sciences or in interdisciplinary programs. To meet these objectives, the program offers a major with the degree of Bachelor of Science or Bachelor of Arts and three minors. We recommend the Bachelor of Arts for students who plan to seek a graduate degree. For more information see the anthropology web site at http:// www.nku.edu/~anthro.

## BACHELOR'S DEGREE PROGRAMS

## Bachelor of Science

The major in anthropology leading to the degree of Bachelor of Science, consists of 44 semester hours and requires the completion of the following:

1. Eight core courses:

ANT 100 Cultural Anthropology
ANT 110 Introductory Archaeology
ANT 202 Introduction to Physical Anthropology
ANT 202L Introduction to Physical Anthropology Laboratory
ANT 210 Introduction to Archaeological Method and Theory
ANT 275 Language and Culture
ANT 312 Social Organization
ANT 480 Advanced Anthropological Concepts
A student must earn at least a $C$ in each of these core courses, except ANT 480 in which a student must earn an $A$.
2. Two topical courses, at least one of which must be at the 300 or 400 level
ANT 231 Modern American Indians
ANT 273 Race, Gender and Culture
ANT 294 Topics: Studies in Anthropology
ANT 301 World Patterns of Race and Ethnicity
ANT 307 Museum Methods
ANT 308 Cultural Resource Management
ANT 310 African Art
ANT 317 Ecological Anthropology
ANT 318 Prehistoric Ecology
ANT 320 Religion and Cultures
ANT 325 Applied Anthropology
ANT 330 Women, Gender \& Culture a Global Perspective
ANT 331 Women in Prehistory
ANT 336 Historical Archaeology
ANT 345 Environmental Anthropology
ANT 350 North American Archaeology
ANT 352 Archaeology of Mesoamerica
ANT 358 Anthropology and the Arts
ANT 371 Psychological Anthropology
ANT 372 Peasant Societies
ANT 375 Anthropology of Aging
ANT 380 Origins of Civilization
ANT 392 Research: Archaeology
ANT 394 Topics: Anthropology
ANT 401 Culture Theory

ANT 410 Archeological Theory
3. Two ethnographic area courses

ANT 201 World Cultures
ANT 230 North American Indians
ANT 240 Peoples of Africa
ANT 245 Peoples of Latin America
ANT 270 Native Australia and Oceania
ANT 360 Indians of Mexico and Guatemala
ANT 370 Celtic Europe
4. One course in methods

ANT 215 Archaeological Field Methods
ANT 307 Museum Methods
ANT 335 Archeological Laboratory Analysis
ANT 340 Ethnographic Methods
ANT 355 Advanced Archeological Field Methods
5. One course in theory

ANT 401 Culture Theory
ANT 410 Archaeological theory
6. Two elective courses in anthropology, at least one of which must be at the 300 or 400 level.
Note: Some courses are listed in more than one category, but a student may not use the same course to fulfill the requirement in more than one category. ANT 294 and ANT 394 may be taken more than once if the topic is different each time.

## Bachelor of Arts in Anthropology

The major in Anthropology leading to the degree of Bachelor of Arts consists of 55 semester hours and requires completion of the following:

1. The above requirements for the Bachelor of Science degree
2. a minimum of 8 semester hours in a modern foreign language (e.g., French, German, Italian, Spanish, Russian, Chinese, Japanese, Arabic, Swahili, etc.)
3. STA 205 Elementary Statistics

## Computer Competency Requirement

Each student must demonstrate competency in the use of computers. This may be done in one of two ways:

1. Complete INF 105 with a grade of $C$ or better
2. Pass a test on computer use given by the anthropology faculty.

## Areas of Emphasis

The major may be completed with emphasis in a subfield of anthropology listed below. This will better prepare students for various careers or for graduate work.

## Cultural Anthropology

Cultural anthropology students take courses covering a variety of world culture areas and on specific aspects of culture such as environmental anthropology, religion, gender, and the arts. These students prepare for careers in multicultural or international fields such as the social and helping services, the travel industry, museum work, health and mental health fields, international affairs and business, or for graduate work in cultural anthropology.

## Archaeology

The major with an emphasis in archaeology prepares students for careers in contract archaeology, museum work, cultural resource management, and public archaeology, or for graduate work in archaeology. Students interested in archaeology should discuss their program of study with the archaeology adviser in the anthropology program.

## Physical Anthropology

An emphasis in physical anthropology may be obtained with anthropology courses in human evolution and primates, and biology courses in genetics, anatomy and physiology, and evolution.

## Applied Anthropology

The anthropology major with a focus on applied courses can be a start towards developing a career in areas relating to the environment, ethnic relations, and community work, among others. Combined with additional coursework in applied sociology, it can lead to employment in a number of fields.

## Teacher Certification

The anthropology major may serve as the nucleus for an area of concentration leading to teacher certification (those pursuing teaching certification must have their program approved by the education chair). Those adding certification to the major must take 6 semester hours of upper-level courses from four of the following: geography, history, economics, political science, sociology, or psychology. (Psychology courses do not fulfill the state's social studies requirements for teacher education).

## Focus in Society, Environment, and Technology

The roles of behavior, culture, and social organization are central to the study of human technology and environment and of their interrelationships. Students majoring in anthropology who have particular interests in issues and problems of the relationships of socio-cultural factors and technology and environment should consider selecting courses addressing those specific concerns. The focus area, in combining anthropology and sociology, prepares students for a close examination of factors associated with issues such as global ecological concerns, the role of technology in social and cultural change, and resource utilization and management, among others. Suggested courses are the following:

ANT 345 Environmental Anthropology
SOC 340 Population
SOC 355 Sociology of the Environment
SOC 360 Technology and Social Change
ANT 345 may be also used to satisfy a topical course requirement in the anthropology major.

## MINORS

## Anthropology Minor

A minor in anthropology consists of 22 semester hours and requires the completion of the following:

1. Six core courses: Cultural Anthropology (ANT 100), Introduction to Physical Anthropology (ANT 202), Introduction to Physical Anthropology Laboratory (ANT 202L), Introduction to Archaeology (ANT 110), Introduction to Archaeological Method and Theory (ANT 210), and Language and Culture (ANT 275).
2. One topical course (e.g., ANT 231, 273, 294, 301, 307, 308, 310, 312, 317, 318, 320, 325, 330, 345, 350, 352, 358, 371, 372, 375, $380,392,394,401$, or 410).
3. One additional course in archaeology (e.g., ANT 215, 335, 336, $350,352,355,380,392$, or 410 ) or in an ethnographic area (e.g., ANT 201, 230, 240, 245, 360, 370, 385, or 392).

## Archaeology Minor

The minor in archaeology is designed to give students competence in prehistory, archaeological methods, and research procedures. It can be valuable in preparing students for graduate study in history, art history, or other disciplines. In conjunction with a major in history, it prepares students for careers in such agencies as state historic preservation offices or various regional offices, where knowledge of both history and archaeology is desirable. The minor can also help prepare students for careers in contract archaeology or museum work. It can provide a broadening of
knowledge to students majoring in various disciplines such as history, literature, or many others.

The minor in archaeology, consists of 21 semester hours and requires completion of the following:

1. Three core courses: Cultural Anthropology (ANT 100), Introduction to Archaeology (ANT 110), and Introduction to Archaeological Method and Theory (ANT 210).
2. One of the following methods courses: ANT 215, 307, or 355.
3. Three of the following: ANT 215, 307, 308, 335, 350, 352, 355, $380,392,410$, HIS 557. (215, 307, 355 may only be used if it was not used as a methods course)
The minor is not open to students majoring in anthropology because an archaeology focus is already available within the major in anthropology.

## Native American Studies

The minor in Native American Studies is interdisciplinary and requires a minimum of 21 semester hours of course work. For program details, see the "NATIVE AMERICAN STUDIES" entry in the Interdisciplinary Minors section of "Interdisciplinary Studies" on page ? of this catalog.

## PHILOSOPHY

The philosophy program missions: (1) to serve students in the colleges of Arts and Sciences, Business, and Professional Studies and Education with foundation courses and an applied philosophy minor with internship opportunities, (2) to provide all students with courses meeting certain general education requirements, (3) to provide advanced courses, a major, and a minor for those who want to specialize in philosophy, and (4) provide graduate courses for the university graduate programs.

Consistent with these missions, courses in philosophy are designed to enable students to increase the scope and depth of their understanding of and sensitivity to basic human beliefs and values, to think creatively and critically about enduring questions of human existence, to integrate the various fields of knowledge into a useful, meaningful whole, to frame their ideas into a justified system of beliefs that provides order and direction in life, to develop basic analytical and logical skills, and to acquaint themselves with the history of philosophy.

## Bachelor's Degree Program

The major in philosophy, leading to the Bachelor of Arts, is designed to meet the needs of students who want to pursue graduate study in philosophy leading to a college teaching career or an applied philosophy position (e.g., biomedical ethical consultant), to enter professional schools where a major in philosophy is suggested as a desirable option (e.g., law or the ministry), or to complement their primary major by adding a major in philosophy. The philosophy major requires a minimum number of courses in order to meet these diverse needs. The courses taken by students majoring in philosophy should be tailored to meet specific needs; close consultation with philosophy faculty can accomplish this purpose.

## The Major in Philosophy ( $\mathbf{3 0}$ semester hours)

PHI 165 Introduction to Logic
PHI 180 History of Classical and Medieval Philosophy
PHI 185 History of Modern and Contemporary Philosophy
One course in ethics from the following:
PHI 155 Introduction to Ethics
PHI 220 Health Care Ethics
PHI 302 Ethics and Science
PHI 307 Business Ethics
PHI 335 Great Traditions in Ethics
At least 12 semester hours in 300- and 400- level courses.
No more than 12 semester hours of 100 -level courses may be applied toward satisfying requirements for the major.

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## MINORS

## Philosophy

Requirements for a minor in philosophy are 21 semester hours in courses in philosophy including no more than 12 semester hours of 100 -level courses.

## Applied Philosophy

Requirements for a minor in applied philosophy are 21 semester hours of courses in philosophy including Introduction to Philosophy (PHI 150); Introduction to Logic (PHI 165); 12 semester hours of relevant course options; and Applied Philosophy Internship (PHI 396). Relevant course options and applied philosophy internships are to be determined in consultation with a philosophy faculty member.

## RELIGIOUS STUDIES

Religious studies is the scholarly examination of the widespread and diverse phenomena of human religious experience, the expression of these experiences in systems of belief and in institutions, and their interaction with culture and society. Religion embodies some of humanity's most profound and enduring attempts to answer perennial questions about the nature of ultimate reality, and about human nature and destiny. An important dimension of religious studies at NKU is its incorporation of
cognate courses from other disciplines, including philosophy, anthropology, sociology, history, geography, and literature.

Religious studies provides a factual and analytical understanding of religion; sympathetic understanding of a wide range of religious traditions, cultures, and values; and an introduction of the relevant literature, vocabulary, and methods used in the scholarly study of religion. This sort of an appreciation of religion is an important component in an individual's liberal education. It is also relevant to many professions and fields including education, law, medicine, nursing, ministry, and human services, and to students interested in graduate study in religious studies.

## The Minor in Religious Studies

The minor in Religious Studies is interdisciplinary and requires minimum of 21 semester hours of course work. For program details, see "RELIGIOUS STUDIES" on page 104 of this catalog.

## Theatre and Dance

## Department

## FACULTY

Ken Jones, chair
Terry D. Powell, assistant chair
Mary Jo Beresford, Sandra Forman, Jane E. Green, Mark Hardy, Daryl L. Harris, Michael Hatton, Christine Jones, Robert Kerby, Michael E. King, Brian Robertson, Ronald A. Shaw, Jamey Strawn, Gretchen H. Vaughn, Charles Wells, Samuel J. Zachary

## CONTACTING THE DEPARTMENT

The Department of Theatre and Dance is located in FA 205 and may be reached during business hours by phone at 859-572-6362. Visit the department's website at http://www.nku.edu/~theatre.

Ken Jones, chair jonesk@nku.edu

## THEATRE AND DANCE PROGRAMS

## Bachelor of Arts

Theatre

## Bachelor of Fine Arts

Acting Emphasis
Dance Emphasis
Musical Theatre Emphasis
Playwriting Emphasis
Design or Technology
Stage Management

## Minors <br> Theatre <br> Dance

## GENERAL EDUCATION COURSES OFFERED

TAR 100 Theatre Appreciation
TAR 102 Survey of Race and Gender in Dramatic Literature
TAR 111 Creative Expression Through Acting
TAR 165 Comparative Arts

Note: For students majoring in Theatre, TAR 102 Survey of Race and Gender in Dramatic Literature fulfills Race and Gender General Education requirements but not Arts and Humanities requirements. TAR 100 Theatre Appreciation does not fulfill any Theatre degree requirements. TAR 111 Creative Expression Through Acting fulfills only Theatre minor requirements.

## PRE-MAJOR OR SELECTIVE ADMISSION REQUIREMENTS

A cumulative grade-point average (GPA) of at least 2.50 in the major is required for graduation with a Bachelor of Arts degree. A GPA of at least 2.75 in all coursework attempted is required for admission into the Bachelor of Fine Arts programs. A GPA of at least 2.75 in the major and approval of a faculty review committee are required for graduation with a Bachelor of Fine Arts degree.

## DEPARTMENT POLICIES

## Computer Literacy Requirement

For students majoring in theatre, TAR 101 Essentials of Theatre fulfills the NKU requirement for computer literacy.

## DEPARTMENT MISSION

The Department of Theatre and Dance will serve the broader NKU vision by becoming a preeminent metropolitan center for excellence in both theatre arts curriculum and production. As an integral part of a liberal arts university, we will remain learner-centered, helping students to negotiate and successfully interact with an increasingly global society. Programmatic priorities will fall upon process which serves as a necessary pathway to product and thus emphasizes the full integration of educational values and artistic creativity.

## NKU DEPARTMENT OF THEATRE AND DANCE PROGRAM OUTCOMES

- To develop and maintain professional quality standards for students training in theatre and dance through coursework, production responsibilities, and performance.
- To guide students to investigate advanced educational opportunities and teaching possibilities.
- To broaden and enhance students’ perception of their world by offering a variety of cultural experiences.
- To encourage students' ability to think critically about theatre and dance by exposing them to a variety of theatrical experiences, theories, and aesthetics.
- To serve as an outreach to the Commonwealth and local community by presenting theatre and dance to the public.

Theatre relies on extensive student participation in and out of the classroom. Preparation comes alive and gains significance through actual production activities. Staff, resources, and facilities exist to serve students in their preparation.

History, theory, and criticism must stand the test of relevance, and production activities at NKU will not exist apart from literary background, conceptual understanding, social and cultural content, and philosophy.

## BACHELOR'S DEGREE PROGRAMS

Seven programs lead to a degree with major in theatre at NKU:

| Degree | Number of semester hours in theatre |
| :--- | :---: |
| BA | 39 |

## BFA

Dance Emphasis 68

Design and Technology 69
Acting Emphasis 65
Musical Theatre Performance Emphasis 67
Stage Management 69
Playwriting Emphasis 65
Students in the BA program must complete a minor or area of concentration. Students in all BFA programs are exempt from the minor or area of concentration requirement but are strongly encouraged to explore relevant coursework in art, music, dance, literature, and/or other disciplines as determined useful through consultation with a faculty advisor.

## Core Curriculum

## All BA and BFA theatre majors must take the following core

 curriculum:| TAR 104 Introduction to Theatre and Dance | 0 |
| :--- | :---: |
| TAR 110 Acting I | 3 |
| TAR 118 Stage Appearance | 3 |
| TAR 160 Stagecraft | 2 |
| TAR 160L Stagecraft Laboratory | 1 |
| TAR 340 Playscript Analysis | 3 |
| TAR 346 History of the Theatre and Dramatic Literature I | 3 |
| TAR 347 History of the Theatre and Dramatic Literature II | 3 |
| TAR 446 History of the Theater and Dramatic Literature III | 3 |
| Production Credits | $\underline{\text { 3-4 }}$ |
| Total | $\mathbf{2 7 - 2 8}$ |

In addition, all BFA theatre majors must take the following core curriculum:

| TAR 477 Business of Theatre | 1 |
| :--- | :--- |
| TAR 495 Senior Project | $\underline{1}$ |
| Total | $\mathbf{2}$ |

## Total

Production credits of 1 semester hour may be taken by any student at the University. However, students majoring or minoring in theatre arts must first complete TAR 160 Stagecraft and TAR 160L Stagecraft Laboratory before enrolling in production credits. Requirements for the number of production credits vary from three to four, depending upon the specific degree undertaken. No more than one production credit per semester may be taken.

Remaining requirements are indicated in the chart below. Information concerning admission and performance standards may be obtained in the theatre office.

## Course Offerings

## Theatre

All TAR (Theatre) courses are grouped and numbered in the following manner:

Group I
Group II
Group III
Group IV
Group V.
Group VI
Group VII

## -10's Acting

-20's Musical theatre
-40's Theatre history/Theory and criticism
-50's Theatre literature
-60's Design and technology
-70's Directing, management, creative dramatics
-80's Playwriting
-90's Production credit and independent study

## Dance

All DAN (Dance) technique classes are grouped and numbered in the following manner:

Group I -20's Dance

## THEATRE

## Course Offerings

TAR 102 Survey of Race and Gender in Dramatic Literature 3
TAR 104 Introduction to NKU Theatre and Dance 0
TAR 111 Creative Expression Through Acting 3
TAR 165 Comparative Arts 3
Group I (Performance)
TAR 110 Acting I 3
TAR 114 Voice Development for the Actor I 3
TAR 118 Stage Appearance 3
TAR 130 Musical Skills for Musical Theatre Actors I 3
TAR 210 Acting II 3
TAR 211 Special Topics in Theatre 1-3
TAR 213 Stage Combat I 3
TAR 225 Musical Theatre Performance I 3
TAR 230 Musical Skills for Musical Theatre Actors II 3
TAR 235 Vocal Techniques for the Singing Actor I 3
TAR 335 Vocal Techniques for the Singing Actor II 3
TAR 310 Acting III 3
TAR 311 Auditions 3
TAR 313 Stage Combat II 3
TAR 316 Acting Seminar I 2-6
TAR 325 Musical Theatre Performance II 3
TAR 410 Styles of Acting 3
TAR 411 Special Problems in Theatre (Acting) 3-9
TAR 412 Internships in Professional Theatre 3-6
TAR 414 Tour Troupes 2
TAR 416 Acting Seminar II 2-6
TAR 417 Acting Shakespeare 3
TAR 418 Process and Production 4-8
TAR 425 Musical Theatre Performance III 3
TAR 610 Coaching of Acting for Teachers 3
DAN 120 Ballet I 3
DAN 220 Ballet II 3
DAN 221 Modern Dance I 3
DAN 222 Jazz Dance I 3
DAN 224 Tap Dance I 3
DAN 226 Foundation Seminar 2
DAN 227 Special Topics (Dance) 2-6
DAN 321 Modern Dance II 3
DAN 322 Jazz Dance II 3
DAN 323 Physiology of Dance 3
DAN 324 Tap Dance II 3
DAN 326 Advanced Dance Seminar II 2-6
DAN 375 Choreography 3
DAN 426 Advanced Dance Seminar II 2-6
DAN 428 Special Problems in Theatre (Dance) 3-9
Group II (History, Theory, and Criticism)
TAR 340 Playscript Analysis ..... 3
TAR 343 Costume History ..... 3
TAR 346 History of the Theatre and Dramatic Literature I ..... 3
TAR 347 History of the Theatre and Dramatic Literature II
TAR 348 Theatre History and Society ..... 3
DAN 427 Dance History ..... 3
TAR 441 Special Problems in Theatre (History, Theory, and Criticism) ..... 1-9
TAR 442 Dramatic Theory and Criticism ..... 3
TAR 443 History of Costume and Decor II ..... 3
TAR 446 History of the Theatre and Dramatic Literature III 3
Group III (Theatre Literature)
TAR 355 Musical Theatre Literature I ..... 3
TAR 452 Special Problems in Theatre (Literature) ..... 3-9
TAR 455 Musical Theatre Literature II ..... 3
Group IV (Theatre Design and Technology)TAR 211 Special Topics: Theatre1-3
TAR 160 Stagecraft I ..... 2
TAR 160L Stagecraft Laboratory ..... 1
TAR 211 Special Topics Theatre ..... 1-3
TAR 260 Lighting Fundamentals ..... 3
TAR 262 Costume Construction ..... 2
TAR 262L Costume Construction Laboratory ..... 1
TAR 265 Fundamentals of Theatrical Design ..... 3
TAR 277 Fundamentals of Sound Design ..... 3
TAR 318 Advanced Makeup ..... 3
TAR 360 Scene Design I ..... 3TAR 361 Design and Construction of Stage Properties
3
TAR 362 Drafting for the Theatre ..... 3
TAR 363 Lighting Design TAR 363 Lighting Design ..... 3
TAR 365 Costume Crafts ..... 3
TAR 366 Costume Design ITAR 367 Stagecraft II3
TAR 368 Theatrical Rendering and Model Building ..... 3
TAR 377 Sound Design ..... 3
TAR 460 Scene Design II ..... 3
TAR 461 Scene Painting ..... 3
TAR 462 Costume Design II ..... 3
TAR 464 Special Problems in Theatre (Technology) ..... 3-9
TAR 465 Advanced Lighting and Projections ..... 3
TAR 466 Costume Construction II ..... 3
TAR 468 Advanced Scenic Art ..... 3
TAR 662 Technical Theatre for Teachers ..... 3
Group V (Directing, Management, and Creative Dramatics)
TAR 370 Directing I3
TAR 371 Theatre Management ..... 3
TAR 376 Stage Management ..... 3
TAR 470 Directing II ..... 3
TAR 471 Summer Dinner Theatre ..... 3-6
TAR 473 Creative Dramatics/Children's Theatre ..... 3
TAR 474 Special Problems in Theatre (Directing and Management) ..... 3-9
TAR 477 The Business of Theatre ..... 1
TAR 670 Directing for Teachers ..... 3
TAR 673 Creative Dramatics for Teachers ..... 3
DAN 375 Choreography ..... 3
Group VI (Playwriting and Reviewing)
TAR 380 Playwriting ..... 3
TAR 480 Reviewing ..... 3
TAR 481 Special Problems in Theatre (Playwriting and Criticism) ..... 3-9
TAR 482 Screenwriting ..... 3
Group VII (Production Hours and Independent Study)
Production Credits ( 1 semester hour each) ..... 1
TAR 495 Senior Project ..... 1
TAR 498-499 Independent Studies in Theatre ..... 1-6

## Graduate Courses

TAR 610 Coaching for Acting for Teachers
TAR 670 Directing for Teachers
TAR 673 Creative Dramatics for Teachers
TAR 662 Technical Theatre for Teachers

## REQUIREMENTS FOR SPECIFIC DEGREE PROGRAMS

## Bachelor of Arts in Theatre

TAR 104 Introduction to NKU Theatre and Dance ..... 0
TAR 110 Acting I ..... 3
TAR 118 Stage Appearance ..... 3
TAR 160 Stagecraft I ..... 2
TAR 160L Stagecraft Lab ..... 1
TAR 340 Playscript Analysis ..... 3
TAR 346 History of the Theatre and Dramatic Literature I ..... 3
TAR 347 History of the Theatre and Dramatic Literature II ..... 3TAR 446 History of the Theatre and Dramatic Literature III
Production Credits ..... 3
3
Electives in Groups I, IV, V, VI (performance, theatre design and technology, directing, management, creative dramatics, playwriting and reviewing) ..... 15
Total ..... 39
A minor or an area of concentration is required.
Bachelor of Fine Arts
Acting Emphasis
TAR 104 Introduction to NKU Theatre and Dance ..... 0
TAR 110 Acting I ..... 3
TAR 114 Voice Development for the Actor I ..... 3
TAR 118 Stage Appearance ..... 3
DAN 120 Ballet I (or other dance course with approval) ..... 3
TAR 160 Stagecraft I ..... 2
TAR 160L Stagecraft Laboratory ..... 1
TAR 210 Acting II ..... 3
TAR 225 Musical Theatre Performance I ..... 3
TAR 310 Acting III ..... 3
TAR 311 Auditions ..... 3
TAR 312 Voice Development for the Actor II ..... 3
TAR 314 Stage Dialects ..... 3
TAR 340 Playscript Analysis ..... 3
TAR 346 History of the Theatre and Dramatic Literature I
TAR 347 History of the Theatre and Dramatic Literature II
TAR 446 History of the Theatre andDramatic Literature III3
TAR 370 Directing ..... 3
Choose 2 of the following 6
TAR 316 Acting Seminar I ..... 3
TAR 410 Styles of Acting ..... 3
TAR 411 Special Problems of Theatre (acting) ..... 3
TAR 415 The One Person Show ..... 3
TAR 416 Acting Seminar II ..... 3
TAR 417 Acting Shakespeare ..... 3
TAR 477 The Business of Theatre ..... 1
TAR 495 Senior Project ..... 1
Production Credits ..... 3
Electives in Groups I, IV, V, VI, VII
(performance, theatre design and technology, directing,management, creative dramatics, playwriting andreviewing)6
Total65

A minor or an area of concentration is not required.

## Musical Theatre Emphasis <br> TAR 104 Introduction to NKU Theatre and Dance

TAR 110 Acting I
TAR 114 Voice Development for the Actor I (with adviser approval, may be waived and substituted with
TAR 312 Voice II or other upper-level voice course)
TAR 118 Stage Appearance
TAR 130 Musical Skills for Musical Theatre Actors I 3
TAR 160 Stagecraft I 2
TAR 160L Stagecraft Laboratory 1
TAR 210 Acting II
3
TAR 225 Musical Theatre Performance I 3
TAR 230 Musical Skills for Musical Theatre Actors II 3
TAR 235 Vocal Techniques for the Singing Actor I 3
TAR 310 Acting III 3
TAR 311 Auditions 3
TAR 325 Musical Theatre Performance II 3
TAR 335 Vocal Techniques for the Singing Actor II 3
TAR 340 Playscript Analysis 3
TAR 346 History of the Theatre and Dramatic Literature I 3
TAR 347 History of the Theatre and Dramatic Literature II 3
TAR 446 History of the Theatre and Dramatic Literature III 3
TAR 477 The Business of Theatre
TAR 495 Senior Project
1

## Production Credits

Electives in Groups I, IV, V, VI, VII - at least 9 semester hours must be in dance (performance,
theatre design and technology, directing, management,
creative dramatics, playwriting and reviewing,
production hours, independent study)
Total
A minor or an area of concentration is not required.

| Playwriting Emphasis |  |
| :--- | :--- |
| TAR 104 Introduction to NKU Theatre and Dance | 0 |
| TAR 110 Acting I | 3 |
| TAR 118 Stage Appearance | 3 |
| TAR 160 Stagecraft I | 2 |
| TAR 160L Stagecraft Laboratory | 1 |
| ENG 292 Creative Writing I | 3 |
| ENG 308 Shakespeare I | 3 |
| ENG 309 Shakespeare II | 3 |
| TAR 340 Playscript Analysis | 3 |
| TAR 346 History of the Theatre and Dramatic Literature I | 3 |
| TAR 347 History of the Theatre and Dramatic Literature II | 3 |
| ENG 300-497 Literature or Writing (not to include ENG |  |
| 309, ENG 308, or ENG 491) | 3 |
| TAR 370 Directing I | 3 |
| TAR 380 Playwriting I | 3 |
| TAR 442 Dramatic Theory and Criticism | 3 |
| TAR 446 History of the Theatre and Dramatic Literature III | 3 |
| TAR 477 The Business of Theatre | 1 |
| TAR 481 Special Problems in Theatre (Playwriting/Criticism) | 6 |
| TAR 482/ENG 491 Screenwriting | 3 |
| TAR 495 Senior Project | 1 |
| TAR 498 Independent Studies in Theatre | 3 |
| Production Credits | 3 |
| Electives in Groups I, II, III, IV, V, VI, VII (performance, |  |
| history, theory, criticism, literature, theatre design and |  |
| technology, directing, management, creative dramatics, |  |
| playwriting and reviewing, production hours, independent |  |
| study | $\mathbf{6}$ |
| Total | $\mathbf{6 5}$ |

TAR 104 Introduction to NKU Theatre and Dance
Playwriting Emphasis
TAR 104 Introduction to NKU Theatre and Dance
TAR 118 Stage Appearance
TAR 160 Stagecraft I 2
TAR 160L Stagecraft Laboratory 1
ENG 292 Creative Writing I 3
ENG 308 Shakespeare I 3
ENG 309 Shakespeare II 3
TAR 340 Playscript Analysis - 3
TAR 347 History of the Theatre and Dramatic Literature II 3
ENG 300-497 Literature or Writing (not to include ENG
309, ENG 308, or ENG 491)
TAR 370 Directing I 3
TAR 380 Playwriting I 3
TAR 442 Dramatic Theory and Criticism 3
TAR 446 History of the Theatre and Dramatic Literature III 3
TAR 481 Special Problems in Theatre (Playwriting/Criticism) 6
TAR 482/ENG 491 Screenwriting 3
TAR 495 Senior Project 1
3
Electives in Groups I, II, III, IV, V, VI, VII (performance, history, theory, criticism, literature, theatre design and technology, directing, management, creative dramatics, playwriting and reviewing, production hours, independent study

## A minor or an area of concentration is not required. <br> Dance Emphasis

TAR 110 Acting I ..... 3
TAR 118 Stage Appearance ..... 3
TAR 160 Stagecraft ..... 2
TAR 160L Stagecraft Lab ..... 1
TAR 225 Musical Theatre I ..... 3
TAR 340 Playscript Analysis ..... 3
TAR 346 History of Theatre \& Drama Literature I ..... 3
TAR 347 History of Theatre \& Drama Literature II ..... 3
TAR 446 History of Theatre \& Drama Literature III ..... 3
TAR 477 Business of Theatre ..... 1
TAR 495 Senior Project ..... 1
Production Credits ..... 3
DAN 120 Ballet ..... 3
DAN 220 Ballet II ..... 3
Choose one from DAN 222 Jazz I, DAN 221 Modern I, or DAN 224 Tap I ..... 3
DAN 226 Foundations ..... 2
Choose one from DAN 321 Modern II, DAN 322 Jazz II, or DAN 324 Tap II ..... 3
DAN 326 Advanced Dance Seminar I ..... 2
DAN 375 Choreography ..... 3
DAN 426 Advanced Dance Seminar II ..... 2
DAN 427 Dance History ..... 3
DAN 428 Special Problems in Theatre (Dance ..... 3
DAN 323 Physiology of Dance ..... 3
Electives from Group I, IV, V, VI ..... g
Total ..... 68

A minor or area of concentration is not required for this degree.

## Bachelor of Fine Arts in Design or Technology General Education Requirement

TAR 165 Comparative Arts

## Required Courses

TAR 104 Introduction to NKU Theatre and Dance 0
TAR 110 Acting I 3
TAR 118 Stage Appearance 3
TAR 160 Stagecraft I 2
TAR 160L Stagecraft Laboratory 1
TAR 260 Lighting Fundamentals 3
TAR 265 Fundamentals of Theatrical Design 3
TAR 340 Playscript Analysis 3
TAR 343 History of Costume and Decor I 3
TAR 346 History of the Theatre and Dramatic Literature I 3
TAR 347 History of the Theatre and Dramatic Literature II 3
TAR 360 Scene Design I
3
TAR 363 Lighting Design I 3
TAR 366 Costume Design I 3
TAR 368 Theatrical Rendering and Model Building 3
TAR 443 History of Costume and Decor II 3
TAR 446 History of the Theatre and Dramatic Literature III 3
TAR 477 Business of Theatre 1
TAR 495 Senior Project 1
Electives in student's area of interest 12

## Foundation Series

Choose 1 of 3
TAR 343 Costume History
TAR 367 Stagecraft II
TAR 362 Drafting for Theatre

## Fundamental Series

Choose 3 of 4
TAR 260 Lighting Fundamentals
TAR 277 Fundamentals of Sound Design
TAR 368 Theatrical Rendering and Model Building
TAR 262 Costume Construction

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## Design Series

Choose 3 of 4
TAR 363 Lighting Design
TAR 377 Sound Design
TAR 366 Costume Design I
TAR 360 Scene Design I
A minor or area of concentration is not required, although students are encouraged to minor in art.

## Areas of Interests

## Scene Design

TAR 361 Design and Construction of Stage Properties 3
TAR 362 Drafting for the Theatre 3
TAR 460 Scene Design II 3
TAR 461 Scene Painting 3
TAR 468 Advanced Scenic Art 3
Costume Design
TAR 262 Costume Construction 2
TAR 262L Costume Construction Laboratory 1
TAR 318 Advanced Makeup 3
TAR 365 Costume Crafts 3
TAR 462 Costume Design II 3
TAR 466 Costume Construction II 3

Lighting Design
TAR 318 Advanced Makeup 3
TAR 362 Drafting for the Theatre 3
TAR 461 Scene Painting 3
TAR 465 Advanced Lighting and Projections 3

## Sound Design

TAR 277 Fundamentals of Sound Technology 3
TAR 377 Sound Design 3
MUS 120 Introduction to Music Theory 3
MUS 130 Introduction to Music Literature 3
MUS 135 Class Piano for Non-Majors 3
MUS 146 Group Voice 3
Technology
TAR 262 Costume Construction 2
TAR 262L Costume Construction Laboratory 1
TAR 361 Design and Construction of Stage Properties 3
TAR 362 Drafting for the Theatre 3
TAR 365 Costume Crafts 3
TAR 367 Stagecraft II 3
TAR 376 Stage Management 3
TAR 461 Scene Painting 3
TAR 466 Costume Construction II 3
TAR 468 Advanced Scenic Art 3

## Bachelor of Fine Arts in Stage Management

## General Education Recommendations

## Behavioral Sciences

PSY 100 is strongly recommended

## Humanities

Choose two course sequence in one of the following foreign languages:

ITA 101, 102, 201, 202 (strongly encouraged)
FRE 101, 102, 201, 202, 320
GER 101, 102, 201, 202, 203
Degree Requirements
TAR 104 Introduction to NKU Theatre and Dance 0
DAN 120 Ballet I 3
TAR 110 Acting I 3
TAR 118 Stage Appearance 3

TAR 160 Stagecraft I 2
TAR 160L Stagecraft Laboratory 1
TAR 265 Fundamentals of Theatrical Design 3
TAR 340 Plastering Analysis 3
TAR 346 History of the Theatre and Dramatic Literature I 3
TAR 347 History of Theatre \& Dramatic Literature II 3
TAR 370 Directing I
TAR 371 Theatre Management 3
TAR 376 Stage Management 2
TAR 376L Stage Management Lab 1
TAR 446 History of the Theatre and Dramatic Literature III 3
TAR 477 The Business of Theatre 1
TAR 495 Senior Project 1
TAR 390/391 Production Credits 3
490/491
HEA 135 Safety and First Aid 3
Choose 2 from:
TAR 260 Lighting Fundamentals 3
TAR 262/L Costume Construction/Lab 3
TAR 277 Fundamentals of Sound Technology 3
Choose 1 from:
TAR 230 Musical Skills for Musical Theatre II 3
MUS 135 Class Piano for Non-Majors 3
Choose 1 from:
CSC 130 Intro to Microcomputers 3
ACC 101 Intro to Accounting 3
CMST 220 Interpersonal Communications 3
Recommended Electives(9 hours)
TAR 210 - Acting II
TAR 213 Stage Combat I
TAR 225 Musical Theatre Performance I
TAR 362 Drafting for Theatre
TAR 367 Stagecraft II
Total
A minor or an area of concentration is not required.
The Minors in Theatre and Dance
Theatre
TAR 111 Creative Expression Through Acting (or TAR 110 Acting I)
TAR 160 Stagecraft I 2
TAR 160L Stagecraft Laboratory 1
TAR 190-191, 290-291, 390-391, 490-491 Production
Credits (1 semester hour each)
Elective in theatre history, theory/criticism, or literature 3
Elective in theatre performance or design/technology 3
Electives in Groups I, II, III, IV, V, VI, and/or VII $\underline{6}$
Total 23
Dance
DAN 120 Ballet I
BIO 208 Human Anatomy and Physiology I (4) or PHE 370 Biomechanics (3)

3 (4)
DAN 220 Ballet II
DAN 221 Modern Dance I 3
DAN 222 Jazz Dance I (or DAN 224 Tap Dance I) 3
DAN 321 Modern Dance II 3
DAN 375 Choreography 3
DAN 427 Dance History $\underline{3}$
Total 24-25
An area of concentration can be earned in either theatre or dance in lieu of the minor, with approval of the Chair of Theatre.

## Visual Arts Department

## FACULTY

Thomas F. McGovern III, chair

Kimberly Allen-Kattus, Barry Andersen, Julie Baker, Nicholas Bonner, Tobias Brauer, Heidi Endres, Ana England, Steven Finke, Richard Fruth, Barbara Houghton, Ben Huber sculpture/ceramics technician, Lisa Jameson, Andrea Knarr, Julie Mader-Meersman, Martin Meersman, Kevin Muente, Chris Smith, Dan Smith, Brad McCombs, Hans Schellhas, Paige Wideman

## CONTACTING THE DEPARTMENT

The Department of Visual Arts is located in FA 312 and may be reached during business hours by phone at 859-572-5421. Visit the department's website at http://www.nku.edu/~art.

Professor Thomas McGovern, chair mcgovern@nku.edu

## DEGREES AND CONCENTRATIONS

## Bachelor of Arts

Graphic Design
Studio Arts
Art Education Option
Art History Option
Applied Photography Option
Studio Option
Bachelor of Fine Arts
Emphases
Applied Photography
Art History
Ceramics
Drawing
Graphic Design
Intermedia
Painting
Photography
Printmaking
Sculpture

## Minors

Studio Art
Art History
GENERAL EDUCATION COURSES OFFERED
ART 100 Art Appreciation
ART 130 Painting for Non-Majors
ARTH 101Survey of Western Art I
ARTH 102Survey of Western Art II
ARTH 103 Survey of Western Art III
ARTH 104 Survey of Asian Art

## SELECTIVE ADMISSION REQUIREMENTS

At the time of initial entrance into the department, all students are viewed as candidates for the BA degree. Admission to BFA program candidacy is by portfolio review. Admission to Graphic Design Program: All candidates are required to enroll in ARTG 283 Graphic Design Admittance Review during the same semester as ARTG 225 Introduction to Graphic Design and ARTG 226 Introduction to Typography.

## ART MAJOR REQUIREMENTS

1. Portfolio Review: Upon completion of 60 semester hours in the university and 27 semester hours in Art, students majoring in Art who intend to apply for admission to the BFA degree option must register for ART 299: in that minimum 60 semester hours must be the core courses (ARTD 210, ART 111, ART 123, and ART 124), one art history survey (ART 101, 102, 103, or 104),
and two studio art courses. To participate in Portfolio Review students must have an overall GPA of 3.0 in Art and a 2.5 overall university GPA. ART 299 Portfolio Review requires students who wish to apply for admission to the BFA to submit their work for review by the art faculty. Students whose intent is to continue as BA candidates are not required to register for ART 299 Portfolio Review. In the event of unsuccessful application to the BFA, a student may reapply only once and after the completion of 75 semester hours of University study. A student whose second application is not successful may continue on to complete the BA degree.
2. To participate in the Portfolio Review, students must have an overall GPA of at least 2.5 and an overall GPA of 3.0 in Art. Students admitted to the BFA degree program must re-declare their major as BFA with the Office of the Registrar.
3. To graduate with the BFA from the department, students must achieve and maintain a minimum overall GPA of 2.5 and must have a minimum GPA of 3.00 in their major.
4. Senior BFA students who have applied for graduation are required to register for ART 497 Senior Exhibition which requires an exhibition of their work and a formal faculty critique of their work.
5. Students are not permitted to enroll in ART 299 Portfolio Review and ART 497 in the same semester.

## INTERMEDIA

The department offers an Intermedia option for students interested in a cross-disciplinary approach to the studio arts. This option draws upon already existing courses and/or courses that might be taught on an experimental basis in the department. With two advising faculty members from appropriate areas within the department, a student writes a contract to combine studio areas at the 300 level or above to form an Intermedia emphasis.

Please note: This area of emphasis is available only after an art major has made successful application to the BFA program. Consult with your advisor regarding this option.

## TRANSFER STUDENTS

Art students transferring to and anticipating graduation from NKU must complete at least 15 semester hours of coursework in the department. Department curriculum requirements will be determined in consultation with such students in the first semester of their transfer. If their intention is to earn the BFA degree, students transferring to NKU who have completed 75 or more semester hours of study, including 21 hours or more in art, must submit their portfolio for review to the art faculty. This should be done during the student's first semester with the department.

The department has policies concerning advanced standing, testing out, and portfolio review. Upon admission to the university, students should contact the art department chair and/or an advisor as soon as possible. Advising sheets are available in the department office.

## FACULTY'S MAIN OBJECTIVES

1. To provide the training necessary to enable students to achieve the level of artist and designer.
2. To prepare students to continue their educational experiences in a graduate institution.
3. To train teachers of the visual arts.
4. To serve the community and the Commonwealth by presenting visual arts to the public.
5. To contribute to the broad educational background that is the mark of the cultured person.
6. To help students at NKU through curriculum, art exhibitions, and hands-on experiences to acquire discriminating taste and soundness of judgment in matters pertaining to the arts.

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## BACHELOR'S DEGREE PROGRAMS

Graphic Design Program
Freshman Year Required Core Courses
Fall
ART 123 Foundations: Studio I 3
ARTD 210 Drawing I 3
ARTH 103 Survey of Western Art III 3
Spring
ART 124 Foundations: Studio II
ART 111 Concepts in Art
ARTG 224 Introduction to Computer Graphics 3
Sophomore Year
Fall
ARTG 225 Introduction to Graphic Design 3
ARTG 226 Introduction to Typography
ARTG 283 Graphic Design Admittance Review 0
Spring
ARTD 310 Intermediate Drawing 3
ARTO 210 Basic Photography
or ARTO 211 Basic Photography for Graphic Designers
Studio elective (200-level or above)
Junior Year
Fall
ARTG 323 Intermediate Graphic Design
ARTP 230 Painting I
Spring
ARTG 321 History of Graphic Design 3
ARTG 325 Production for Graphic Designers 3
ARTG 326 Illustration

## Senior Year

Fall
Studio elective (300-level or above)
Total semester hours in program

## Studio Arts Program

Required Core Courses
Semester I
ART 123 Foundations: Studio I
ARTD 210 Drawing I
Semester II
ART 124 Foundation: Studio II 3
ART 111 Concepts in Art
The following requirements may be taken after completing ART 123 and ARTD 210
Required Art History Courses
ARTH 101, 102, 103 Survey of Western Art I, II, III;
ARTH 104; Survey of Asian Art (Choose 3 three for a total of 9 credits)
One in upper-division art history
Required Studio Courses
Studio concentration (18 credit hours): electives in this area must include at least 3 credits in 2D arts and at least 6 credits in 3D arts
*BA degree students must have an outside minor or area of concentration. An area of concentration is 12 hours at the 300 or 400 level. Students must also complete the General Education program required by the university. No classes receiving a $D$ or lower can be counted toward a major in Art.

## Studio Arts Program <br> Studio Arts (Applied Photography Option)

Required Core Courses Semester I

ART 123 Foundations: Studio I 3
ARTD 210 Drawing I 3
Semester II
ART 111 Concepts in Art 3
ART 124 Foundations: Studio II 3
ART 210 Drawing I 3
The following requirements may be taken after completing ART 123, ARTD 121 and ARTH 103.
Required Studio Courses
ARTO 210 Basic Photography 3
ARTH 358 History of Photography 3
ARTO 310 Photography II 3
ARTO 311 Intermediate Photography 3
ARTO 313 Applied Photography 3
ARTO 314 Applied Photography II 3
ARTO 315 Documentary Photography 3
ARTO 316 Web Design for Artists 3
ARTO 320 Color and Digital Photography 3
ARTO 410 Advanced Photography 3
Elective in art history 3
2D elective taken before end of year II 3
3D elective taken before end of year II $\underline{3}$
Total semester hours in program 54

## Studio Arts (Art History Option)

## Required Core Courses

Semester I
ART 123 Foundations: Studio I
ARTD 210 Drawing I 3
Semester II
ART 124 Foundations: Studio II 3
ART 111 Concepts in Art 3
The following requirements may be taken after completing
ART 123 and ARTD 210
Required Art History Courses
ARTH 101, 102, 103 (Surveys of Western Art I, II, III) 9
ARTH 104 Survey of Asian Art 3
Upper-division art history electives 9
Required Studio Courses
3 ART courses with a minimum of one in 2D studio and one in 3D studio
Other Requirements
Foreign language: two semesters or high school equivalent 8
Electives chosen from religion, philosophy, anthropology, or history in consultation with adviser _
Total semester hours in program 62
*BA degree students must have an outside minor or area of concentration. An area of concentration is 12 hours at the 300 or 400 level. Students must also complete the General Education program required by the university.

## Studio Arts (Art Education Option)

Students pursuing an art education/P-12 curriculum should review that portion of the undergraduate catalog relating to secondary education program requirements. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and Human Services.

To complete degree requirements, students must satisfy art, education, and general education requirements.

Required Core Courses
Semester I
ART 123 Foundations: Studio I
ARTD 210 Drawing I
Semester II
ART 111 Concepts in Art ..... 3
ART 124 Foundations: Studio II ..... 3
The following requirements may be taken after completingART 123 and ARTD 210
Required Art History Courses
ARTH 101, 102, 103 (Surveys of Western ART I, II, III);
ARTH 104 Survey of Asian Art - choose 3 courses fora total of 9 credits)9
One upper-division art history ..... 3
Required Studio Courses
ARTD 310 Intermediate Drawing ..... 3
ARTP 230 Painting I ..... 3
(ARTP 230 may be applied to concentration or explorationcredits)
Studio Concentration:
12 credits ( 9 credits must be in upper-division courses) ..... 12
Studio Explorations:
12 credits from studio courses not in concentration ..... 12
Required Art Education Courses
ARTE 281 Concepts in Art Education ..... 3
ARTE 282 Art Education Content I ..... 3
ARTE 382 Art Education Content II ..... 3
Total semester hours in program ..... 60

## Bachelor of Fine Arts (BFA) Programs

Students admitted to the BFA programs are not required to fulfill a minor or area of concentration outside the major. Nonetheless, the department strongly encourages these students to take any elective hours outside of art to create breadth in their body of knowledge.

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Applied Photography Emphasis
Required Core Courses
    Semester I
        ARTH }103\mathrm{ Survey of Western Art III 3
        ART 123 Foundations: Studio I 3
        ARTD 210 Drawing I 3
        Semester II
        ARTH 102 Survey of Western Art II 3
        ART 111 Concepts in Art 3
        ART }124\mathrm{ Foundations: Studio II
        3
        The following requirements may be taken after completing
            ART 123, ARTD }210\mathrm{ and ARTH }103
Required Studio Courses
    ARTO 210 Basic Photo3ART 299 Portfolio Review (2nd semester of sophomore yearor 1st semester of junior year at latest)0
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ARTH 358 History of Photography ..... 3
ARTO 310 Photography II ..... 3
ARTO 311 Intermediate Photography ..... 3
ARTO 313 Applied Photography I ..... 3
ARTO 314 Applied Photography II ..... 3
ARTO 315 Documentary Photography ..... 3-6
ARTO 320 Color and Digital Photography ..... 3
ARTO 410 Advanced Photography ..... 3
ART 450 Advanced Studio Seminar ..... 3
ART 497 Senior Exhibition (optional) ..... 0
2D elective 200 level or above ..... 3
3D elective 200 level or above ..... 3
One upper-division art history elective ..... 3
Electives chosen from: ARTO 218, ARTO 411, ARTO 417, ARTO 418 or BIO 350 ..... 6
Total semester hours in program ..... 63-66

## Art History Emphasis

Required Core Courses
Semester I
ART 123 Foundations: Studio I ..... 3
ARTD 210 Drawing I ..... 3
Semester II
ART 111 Concepts in Art ..... 3
ART 124 Foundations: Studio II ..... 3
The following requirements may be taken after completing ART 123 and ARTD 210. ..... 9
ARTH 104 Survey of Asian Art ..... 3
ARTH 458 Art History Methodology and Criticism ..... 3
Electives in upper-division art history ..... 12
Required Studio Courses
ARTP 230 Painting I3
ARTS 262 Sculpture I ..... 3
Studio electives (Choose two courses for a total of 6 hours)
ARTC 240 Ceramics I, ARTR 272 Printmaking I, orARTO 210 Basic Photography6
ART 299 Portfolio Review (taken 2nd semester of sophomore year or 1st semester of junior year at the latest) 0
Additional Requirements
ART 499 Gallery Internship ..... 3
Foreign language: four semesters or high school equivalent ..... 14
Electives chosen from anthropology, history, philosophy, religion in consultation with adviser ..... 9
ART 497 Senior Project _ ..... ㅇ
Total semester hours in program ..... 77
Ceramics Emphasis
Required Core CoursesSemester I
ART 123 Foundations: Studio I3
ARTD 210 Drawing I ..... 3
Semester II
ART 111 Concepts in Art ..... 3
ART 124 Foundations: Studio II ..... 3
The following requirements may be taken after completing ART 123 and ARTD 210.
Required Art History Courses
ARTH 101, 102103 (Surveys of Western Art I, II, III or ARTH 104 Survey of Asian Art: choose three for a total of 9 credits) ..... 9
Required Studio Courses
ARTP 230 Painting I ..... 3
ARTC 240 Ceramics I ..... 3
ARTS 262 Sculpture I ..... 3
ARTR 272 Introduction to Printmaking ..... 3
ARTO 210 Basic Photography ..... 3
ART 299 Portfolio Review (taken 2nd semester of sophomore year or 1st semester of junior year at the latest) 0
ARTC 340 Wheel Throwing ..... 3
ARTC 341 Ceramic Sculpture ..... 3
Additional 300-level ceramics ..... 3
ARTC 440 Advanced Ceramics (repeated for 6-12 hours) ..... 6-12
ARTC 442 Ceramics Materials and Techniques ..... 3
ARTC 450 Advanced Studio Seminar ..... 3
Two upper-division art history courses ..... 6
ART 497 Senior Exhibition ..... 63-69
Drawing EmphasisRequired Core Courses
Semester I
ART 123 Foundation: Studio I ..... 3
ARTD 210 Drawing I ..... 3

## 90 Northern Kentucky University

ART 111 Concepts in Art
ART 124 Foundations: Studio II
The following requirements may be taken after completing ART 123 and ARTD 210.
Required Art History Courses
ARTH 101, 102, 103 (Surveys of Western Art I, II, III or
ART 104 Survey of Asian Art: any 3 - total of 9 credits)
Required Studio Courses
ARTP 230 Painting I
ARTC 240 Ceramics I
ARTC 262 Sculpture I
ARTC 272 Introduction to Printmaking
ARTO 210 Basic Photography
ART 299 Portfolio Review (taken 2nd semester of
sophomore year or 1st semester of junior year at the latest) 0
ARTD 310 Intermediate Drawing 3-6
ARTD 410 Advanced Drawing 9-12
Electives in Art (6 hours)
ART 450 Advanced Studio Seminar 3
Upper-division art history (6 hours) 6
ART 497 Senior Exhibition 0
Total semester hours in program

## Graphic Design Emphasis

Freshman Year Required Core Courses
Fall
ART 123 Foundations: Studio I
ARTD 210 Drawing I
Art History Survey Selection (choice \#1 of 3) 3
Spring
ART 124 Foundations: Studio II 3
ART 111 Concepts in Art 3
ARTG 224 Intro to Computer Graphics 3
Sophomore Year
Fall
ARTG 225 Introduction to Graphic Design
ARTG 226 Introduction to Typography
Art History Survey Selection (choice \#2 of 3)
ARTG 283 Graphic Design Admittance Review
Spring
ARTD 310 Intermediate Drawing
ARTO 210 Basic Photography OR
ARTO 211 Basic Photography for Designers
3D Studio elective (can be taken senior year)
Junior Year
Fall
ARTG 323 Intermediate Graphic Design
ARTP 230 Painting I
Art History (choice \#3 of three)
ART 299 Portfolio Review

## Spring

ARTG 321 History of Graphic Design
ARTG 325 Production for Graphic Designers
ARTG 326 Illustration
Senior Year
Fall
ARTG 327 Advanced Typography
ARTG 425 Advanced Graphic Design I

## 2D Studio elective (can be taken sophomore year)

## Spring

ARTG 421 Special Topics in Graphic design
ARTG 426 Advanced Graphic Design II
BFA Year
Fall
ARTG 428 Senior Project in Graphic Design
Studio elective

ART 497 Senior Exhibition
Spring
ARTG 496 Experiential Component
3
Total semester hours in program

## Intermedia Emphasis (by permission only)

This area of emphasis is by permission only. An intermedia contract is available in the department and requires signatures from art faculty and the department chair. Intermedia is intended for students who wish to work across studio disciplines and must involve two or more studio areas.
Required Core Courses
Semester I
ART 123 Foundations: Studio I 3
ARTD 210 Drawing I 3
Semester II
ART 111 Concepts in Art 3
ART 124 Foundations: Studio II 3
The following requirements may be taken after completing
ART 123 and ARTD 210:
Required Art History Courses
ARTH 101, 102, 103 (Surveys of Western Art I, II, III or
ARTH 104 Survey of Asian Art: any 3 - total of 9 credits) 9
Required Studio Courses
ARTP 230 Painting I
3
ARTC 240 Ceramics I 3
ARTS 262 Sculpture I 3
ARTR 272 Introduction to Printmaking 3
ARTO 210 Basic Photography 3
ART 299 Portfolio Review (taken 2nd semester of
sophomore year or 1st semester of junior year at the latest) 0
ARTD 310 Intermediate Drawing
Electives: from 2 or 3 areas of emphases at
300-level or above
21-24
Two upper-division art history courses 6
ART 450 Advanced Studio 3
ART 497 Senior Exhibition $\quad 0$
Total semester hours in program 69-72
Painting Emphasis
Required Core Courses
Semester I
ART 123 Foundations: Studio I 3
ARTD 210 Drawing I 3
Semester II
ART 124 Foundations: Studio II 3
ART 111 Concepts in Art 3
The following requirements must be taken after completing
ART 123 and ARTD 210.
Required Art History courses:
ARTH 101, 102, 103 (Surveys of Western Art I,
II, III or ART 104 Survey of Asian Art: any 3 - total 9 hours )9
Required Studio Courses:
ARTP 230 Painting I 3
ARTC 240 Ceramics I 3
ARTS 262 Sculpture I 3
ARTO 290 Basic Photography 3
ARTR 272 Introduction to Printmaking 3
ART 299 Portfolio Review (taken 2nd semester of
$\quad$ sophomore year or 1st semester of junior year at the latest) 0
ARTD 310 Intermediate Drawing 3
ARTP 330 Painting II 3-6
ARTP 333 Materials and Techniques in Painting 3-6
ARTP 430 Painting III 6-9
ART 450 Advanced Studio seminar 3
Upper-division Studio elective 3
Upper-division Art History 6
ART 497 Senior Exhibition ..... 0
Total semester hours in program ..... 60-69
Photography Emphasis
Required Core Courses
Semester I
ART 123 Foundations: Studio I ..... 3
ART 210 Drawing I ..... 3
Semester II
ART 124 Foundations: Studio II ..... 3
ART 111 Concepts in Art ..... 3
The following requirements may be taken after completingART 123 and ARTD 210
Required Art History courses:
ARTH 101, 102, 103 (Surveys of Western Art I, II,
III or ART 104 Survey of Asian Art: any 3 - total of 9 hours) ..... 9
Required Studio courses
ARTP 230 Painting I ..... 3
ARTC 240 Ceramics I ..... 3
ARTS 262 Sculpture I ..... 3
ARTR 272 Introduction to Printmaking ..... 3
ARTO 210 Basic Photography ..... 3
ART 299 Portfolio Review (taken 2nd semester of sophomore year or 1st semester of junior year at the latest) 0
ARTO 358 History of Photography ..... 3
ARTO 310 Photography II ..... 3
ARTO 311 Intermediate Photography ..... 3-6
ARTO 313 Applied Photography I or
ARTO 314 Applied Photography II ..... 6
ARTO 315 Documentary Photography ..... 3
ARTO 316 Web Design for Artists ..... 3
ARTO 320 Color and Digital Photography ..... 3
ART 450 Advanced Studio seminar ..... 3
ARTO 410 Advanced Photography ..... 3
Electives choose one from ARTO 218, ARTO 318, ARTO 417 or ARTO 418 ..... 3-6
Upper-division art history elective ..... 3
ART 497 Senior Exhibition ..... -
Total semester hours in program ..... 72-75
Printmaking Emphasis
Required Core Courses
Semester I
ART 123 Foundations: Studio I ..... 3
ARTD 210 Drawing I ..... 3
Semester II
ART 124 Foundations: Studio II ..... 3
ART 111 Concepts in Art ..... 3
The following requirements may be taken after completing
ART 123 and ARTD 210.
Required Art History courses:
ARTH 101, 102, 103 (Surveys of Western Art I, II,
III or ART 104 Survey of Asian Art: any 3 - total of 9 hours) 9
Required Studio Courses:
ARTP 230 Painting I ..... 3
ARTC 240 Ceramics I ..... 3
ARTS 262 Sculpture I ..... 3
ARTR 272 Introduction to Printmaking ..... 3
ARTO 210 Basic Photography ..... 3
ART 299 Portfolio Review (taken 2nd semester of sophomore year or 1st semester of junior year at the latest) 0
ARTR 373 Intermediate Printmaking ..... 3-6
ARTR 374 Techniques in Printmaking ..... 3-12
ART 450 Advanced Studio Seminar ..... 3
ARTR 473 Advanced Printmaking ..... 6-12ART 497 Senior Exhibition0
Any 300-level studio course ..... 3
Two 300-level or above Printmaking Studios ..... 6
Two upper-division art history electives ..... 6
Total semester hours in program ..... 66
Sculpture Emphasis
Required Core Courses
Semester I
ART 123 Foundations: Studio I ..... 3
ARTD 210 Drawing I ..... 3
Semester II
ART 124 Foundations: Studio II ..... 3
ART 111 Concepts in Art ..... 3
The following requirements may be taken after completing
ART 123 and ARTD 210
Required Art History Courses
ARTH 101, 102, 103 (Surveys of Western Art I, II, III
or ART 104 Survey of Asian Art - any 3 - total of 9 hours) ..... 9
Required Studio Courses:3
ARTC 240 Ceramics 1 ..... 3
ARTS 262 Sculpture I ..... 3
ARTR 272 Introduction to Printmaking ..... 3
ARTO 210 Basic Photography ..... 3
ART 299 Portfolio Review (taken 2nd semester of sophomore year or 1st semester of junior year at the latest) 0ARTC 341 Ceramic Sculpture3
ARTS 362 Special Topics in Sculpture: Concepts and Media ..... 9
ART 450 Advanced Studio seminar ..... 3
ARTS 460 Sculpture: Advanced Study ..... 6-12
Two upper-division art history courses ..... 6
ART 497 Senior Exhibition ..... 0
$63-69$
The Minor in Art
ARTH 101, 102, 103 (Surveys of Western Art I, II, III; ARTH 104 Survey of Asian Art - any two courses) ..... 6
ART 123 Foundations: Studio I ..... 3
ART 124 Foundations: Studio II ..... 3
Electives chosen from art history, ceramics, drawing, painting, photography, printmaking, sculpture ..... 15
Total semester hours in program ..... 27
The Minor in Art for Non Art Majors (Art History Emphasis)ARTH 101, 102, 103, 10412
Three Art History electives ..... 9
One Studio Elective ..... $\underline{3}$
Total semester hours in program ..... 24

## World Languages and

## Literatures Department

## FACULTY

Carol Ann Costabile-Heming, chair
Caryn C. Connelly, Lydia F. Coyle, Irene F. Encarnación, Nancy K. Jentsch, Barbara A. Klaw, Katherine C. Kurk, Hilary W. Landwehr, Thomas H. Leech, Gisèle Loriot-Raymer, Tracy M. Muñoz, Blas Puente-Baldoceda

## CONTACTING THE DEPARTMENT

Contact information for the Department of World Languages, Literature, and Cultures can be found online at http://www.nku.edu/~wll.

## PROGRAMS IN WORLD LANGUAGES AND LITERATURES

## Majors

French, German, Spanish
French with Teaching Certification
German with Teaching Certification
Spanish with Teaching Certification

## Minors

French, German, Spanish
French with Teaching Certification
German with Teaching Certification
Spanish with Teaching Certification

## Interdisciplinary Minors

Teaching certification in Arabic, Chinese, and Japanese is available in conjunction with the interdisciplinary minors in Chinese, Japanese, and Middle Eastern and North African Studies. Detailed information is included in the catalog section on interdisciplinary minors. Timely completion of these options may require transfer credit, summer attendance, or participation in an appropriate international study experience.

## MISSION OF THE DEPARTMENT OF WORLD LANGUAGES AND LITERATURES

The faculty of World Languages and Literatures seeks to provide excellence in education through teaching, research, and community involvement. It supports the university's mission to educate students to be informed, contributing members of their communities -- regionally, nationally, and internationally--by preparing them to work and interact in an increasingly multilingual and multicultural society. Specifically, the department programs and curricula provide students an opportunity to acquire oral and written competence in Arabic, Chinese, French, German, Italian, Japanese, Russian, and Spanish and reading competence in Latin, as well as knowledge of the literatures and cultures associated with these languages, which is essential to careers in teaching, interpretation, public service, and international business and to the understanding of human behavior in a global context.

In keeping with the diversity inherent in the study of languages and cultures and in alignment with the university's core values, the department fosters a culture of openness, inclusion, and respect.

## GENERAL EDUCATION COURSES OFFERED <br> Literature

FRE 320 Survey of French Literature
GER 320 Survey of German Literature

SPI 320 Survey of Peninsular Spanish Literature SPI 321 Survey of Spanish American Literature

## Foreign Languages

Arabic
ARI 101 Elementary Arabic I
ARI 102 Elementary Arabic II
ARI 201 Intermediate Arabic I
ARI 202 Intermediate Arabic II
Chinese
CHI 101 Elementary Chinese I
CHI 102 Elementary Chinese II
CHI 201 Intermediate Chinese I
CHI 202 Intermediate Chinese II
French
FRE 101 Elementary French I
FRE 102 Elementary French II
FRE 201 Intermediate French I
FRE 202 Intermediate French II
German
GER 101 Elementary German I
GER 102 Elementary German II
GER 201 Intermediate German I
GER 202 Intermediate German II
Italian
ITA 101 Elementary Italian I
ITA 102 Elementary Italian II
ITA 201 Intermediate Italian I
ITA 202 Intermediate Italian II
Japanese
JPN 101 Elementary Japanese I
JPN 102 Elementary Japanese II
JPN 201 Intermediate Japanese I
JPN 202 Intermediate Japanese II
Latin
LAT 101 Elementary Latin I
LAT 102 Elementary Latin II
LAT 201 Intermediate Latin I
LAT 202 Intermediate Latin II
Russian
RUS 101 Elementary Russian I
RUS 102 Elementary Russian II
RUS 201 Intermediate Russian I
RUS 202 Intermediate Russian II
Spanish
SPI 101 Elementary Spanish I
SPI 102 Elementary Spanish II
SPI 201 Intermediate Spanish I
SPI 202 Intermediate Spanish II

## DEPARTMENTAL PLACEMENT AND RETROACTIVE CREDIT POLICIES

No course in the 101, 102, 201, 202 sequence in one of these languages may be taken for credit by a student who has already received credit for this course or a higher numbered course in this sequence or any upper-division course in the same language without departmental permission. Initial placement in French, German, or Spanish must be in accord with departmental placement guidelines. The WebCAPE placement test is required. Retroactive credit through the Foreign Language Incentive Program may be available for students who enroll in courses at a higher level than 101. Placement above or below the range specified in the guidelines requires departmental approval. Students whose placement does not reflect departmental guidelines may be removed from a course. The WebCAPE placement test, detailed placement guidelines and information about retroactive credit options can be found at http://minerva.nku.edu/ placement.htm.

## PRE-MAJOR AND SELECTIVE ADMISSIONS REQUIREMENTS

 None
## Assessment

All graduating seniors with majors in French, German, or Spanish or with minors with teaching certification in Arabic, Chinese, French, German, Japanese, or Spanish are required to submit a portfolio at the time their program is certified for graduation. Guidelines for the portfolio can be found in the WLL majors' handbook and online at http:// www.nku.edu/~wll.

## Grade Policy

No course in which a grade below a $C$ is earned can be used to fulfill the major course requirements in French, Spanish, or German or the certification requirements for the content area in Arabic, Chinese, or Japanese.

## BACHELOR'S DEGREE PROGRAMS

The major in French, German, and Spanish, while requiring both literary and cultural study, allows students to emphasize literature or culture through the choice of electives and interdisciplinary courses. The major in French, German, or Spanish with teacher certification is offered for students who wish to obtain P-12 certification in a language.

## Bachelor of Arts in French

The degree of Bachelor of Arts is conferred upon students completing the major in French ( 36 semester hours).
Core Courses in French
FRE 201-202 Intermediate French I and II
FRE 304 French Composition and Conversation
Culture Study
Select from FRE 250 Business French, FRE 310 French Culture and Society Today, FRE 311 French Cultural History, FRE 480
Topics in French Culture, FRE 520 Readings in French (culture topic) 9 Literary Study

Select from FRE 320 Survey of French Literature, FRE 322
French Drama, FRE 323 French Prose Fiction, FRE 481 Topics in French Literature, FRE 520 Readings in French (literary topic)

## Interdisciplinary Course Component

Select from ENG 206 Western World Literature I, ENG 207
Western World Literature II, ENG 314 Modern European Literature in Translation, ENG 381 Introduction to Linguistics, GEO 402 Geography of Europe, HIS 409 The French Revolution, PSC 330 Politics of Europe
Electives in French above the 202 level
Total

## Bachelor of Arts in French with Teaching Certification

Students pursuing a major in French with secondary certification (39 semester hours) should review that portion of this catalog relating to education and health/physical education. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and with the certification advisor in French.

In addition to the curriculum above for the major in French, students seeking the bachelor's degree in French with P-12 teaching certification must complete FRE 350 Methods of Teaching French and all required teacher education and general education courses. They must also fulfill all departmental requirements involving the portfolio and other required assessments as specified in the Handbook for World Language Majors.

## Bachelor of Arts in German

The degree of Bachelor of Arts is conferred upon students completing the major in German ( 36 semester hours).
Core Courses in French
GER 201-202 Intermediate German I and II

GER 304 German Composition and Conversation
Culture Study
Select from GER 250 Business German, GRE 310 Contemporary German Life, GER 311 GER Cultural History, GER 480 Topics in German Culture, GER 520 Readings in German (culture topic) Literary Study

Select from GER 320 Survey of German Literature, GER 322 German Drama, GER 323 German Prose Fiction, GER 481 Topics in German Literature, GRE 520 Readings in German (literary topic) 9 Interdisciplinary Course Component

Select from ENG 201 The Holocaust, ENG 206 Western World Literature I, ENG 207 Western World Literature II, ENG 314 Modern European Literature in Translation, ENG 350 Literary Criticism, ENG 371 Traditional Grammar, ENG 381 Introduction to Linguistics, HIS 303 Medieval Europe, HIS 304 Renaissance Europe, HIS 305 Reformation Europe, HIS 308 Modern Europe 1870-1920, HIS 309 Modern Europe since 1920, HIS 363 History of Germany to 1870, HIS 363 History of German since 1870, HIS 413 History of Nazi Germany, HIS 414 The Holocaust, PSC 330 Politics of Europe, PSC 394 Comparative Politics (relevant topic), PSC 394 International Politics (relevant topic).GEO 402 Geography of Europe 3 Electives in German above the 202 level

## Total

## Bachelor of Arts in German with Teaching Certification

Students pursuing a major in German with P-12 certification (39 semester hours) should review that portion of this catalog relating to education and health/physical education. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and with the certification advisor in German..

In addition to the curriculum above for the major in German, students seeking the bachelor's degree in German with P-12 teaching certification must complete GER 350 Methods of Teaching German and all required teacher education and general education courses. They must also fulfill all departmental requirements involving the portfolio and other required assessments as specified in the Handbook for World Language Majors.

## Bachelor of Arts in Spanish

The degree of Bachelor of Arts is conferred upon students completing the major in Spanish ( 36 semester hours).
Core Courses in Spanish
SPI 201-202 Intermediate Spanish I and II
SPI 304 Spanish Composition and Conversation Culture Study

Select from SPI 250 Business Spanish, SPI 310 Spanish Culture and Civilization, SPI 311 Spanish-American Culture and Civilization, SPI 480 Topics in Spanish and Spanish-American Culture, SPI 520 Readings in Spanish (culture topic)
Literary Study
Select from SPI 320 Survey of Peninsular Spanish Literature, SPI 321 Survey of Spanish-American Literature, SPI 322 Hispanic Drama, SPI 323 Hispanic Prose Fiction, SPI 481 Topics in Spanish and Spanish-American Literature, SPI 520 Readings in Spanish (literary topic)
Interdisciplinary Course Component
Select from ENG 206 Western World Literature I, ENG 207
Western World Literature II, ENG 314 Modern European Literature in Translation, ENG 381 Introduction to Linguistics, HIS 325 Early Latin American History, HIS 326 Recent Latin American History, GEO 402 Geography of Europe, GEO 406 Geography of Latin America, PSC 330 Politics of Europe, PSC 335 Latin American Politics, SOC 245 Latin American Societies

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## Spanish with Teaching Certification

Students pursuing a major in Spanish with secondary certification (39 semester hours) should review that portion of this catalog relating to education and health/physical education. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and with the secondary education adviser in foreign languages in the Department of Literature and Language.

In addition to the curriculum above for the major in Spanish, students seeking the bachelor's degree in Spanish with P-12 teaching certification must complete SPI 350 Methods of Teaching Spanish and all required teacher education and general education courses. They must fulfill all departmental requirements involving the portfolio and other required assessments as specified in the Handbook for World Language Majors..

## The Minors in World Languages, Literatures and Cultures French, German, Spanish

The minor in a modern foreign language consists of 21 semester hours in French, German, or Spanish, distributed as follows: Intermediate-level language study

FRE 201-202; or GER 201-202; or SPI 201-202
Composition and conversation course
FRE 304; or GER 304; or SPI 304
Culture study
FRE 250, 310, 311, 480; or GER 250, 310, 311, 480; or SPI
250, 310, 311, 480
3
Literary study
FRE 320, 322, 323, 481; or GER 320, 322, 323, 481; or SPI 320, 321, 322, 323, 481
Electives in culture or literary study
In addition to culture and literature courses listed above, may include FRE 280, or GER 280, or SPI 280
Total
French, German, or Spanish with Teaching Certification Two intermediate courses (201-202)
Composition and conversation course (304)

One course focusing on culture study (FRE 250, 310, 311, 480; GER 250, 310, 311, 480; SPI 250, 310, 311, 480)
One course focusing on literary study (FRE 320, 322, 323, 481; GER 320, 322, 323, 481; SPI 320, 321, 322, 323, 481)3
One teaching methods course (FRE 350; GER 350; SPI 350) 3
Two elective courses above the 202 level $\underline{6}$
Total

Arabic, Chinese, or Japanese with Teaching Certification
Two intermediate courses (201-202)

Fifteen hours of credit in ARI 380, CHI 380, or JPN 380
including a linguistics topic
One teaching methods course (ARI 350, CHI 350, JPN 350) 3 two interdisciplinary electives (for Arabic, ENG 313, HIS 392, PSC 394, or REL 305; for Chinese, ARTH 104, ENG 216, GEO 410, HIS 330, PHI 250, PSC 394, or SOC 340; for Japanese, ARTH 104, ENG 216, GEO 410, HIS 331, PHI 250, PSC 394 or POP 345).
Total
Detailed information on the minors in Chinese Studies, Japanese Studies, and Middle Eastern and North African Studies is included in the catalog section on interdisciplinary minors. Timely completion of these certification options may require transfer credit, summer attendance, or participation in an appropriate international study experience. Students pursuing P-12 certification in Arabic, Chinese, or Japanese should review that portion of this catalog relating to education and health/physical education. Upon deciding to pursue the teacher education program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education and with the certification advisor for their respective languages. In addition to the curriculum for the content area, students pursuing P-12 certification must complete all related portfolio and assessment requirements, all education requirements for certification, and all general education requirements.

## Organizational Leadership Program

## FACULTY

Kent Curtis, coordinator
Frederick Brockmeier, Tom Edwards, Syl Flores, Dixie Leather

## PROGRAM DESCRIPTION

The Organizational Leadership degree provides knowledge of organizational structures, human behavior, and techniques of effective leadership. The program focuses on four components: 1. Professional environment - human relations, social and organizational psychology; 2. Communications - communication techniques, professional writing, and international communications, and Internet concepts and techniques; 3. Leadership - leading in the professional environment and team dynamics; and 4. 12-Hour Area of Concentration - adviser approved theme of courses for each student's personal and professional development.

The Organizational Leadership program is designed for students with professional career paths in supervision and leadership with an emphasis on human behavior and interpersonal relationships.

## Student Advising

All students contemplating admission to the program must contact the program advisor for an appointment to discuss admission criteria and to obtain guidance in course selection.

## Program of Study

## General Education (48 semester hours)

All students will be required to complete the General education requirements as outlined in this catalog.

Recommended General Education Courses: PSY 100 Introduction to Psychology (prerequisite to major courses)
STA 205 Introduction to Statistical Methods

## Electives: (35 semester hours)

The degree includes 35 semester hours of electives, may be on topics other than the specific requirements for General Education, the Leadership Core, or the Minor/Area of Concentration

## Leadership Core (33 semester hours)

Professional Environment and Communication (12 semester hours)
ENG 340 Business Writing
PSY 340 Social Psychology
PSY 344 Industrial/Organizational Psychology
CMST 303 Organizational Communications

Leadership Component (21 semester hours)
LDR 305 Human Relations in Organizations
LDR 308 Leadership in Organizations
LDR 315 Personnel Management
LDR 381 Organizational Ethics
LDR 382 Organizational Change
LDR 395 Teamwork in Organizations
LDR 480 Organizational Leadership Capstone

## Minor or Area of Concentration

If a minor is selected it must be declared and certified by the department offering the minor and the courses requirements are specified in this catalog. If an area of concentration is selected, it must be approved by the major advisor. Course selection may be tailored to each student's educational objectives.

## Delivery

This degree is available in a variety of delivery modes including 1) traditional face to face with classes in the major being offered primarily in the evenings or on weekends, 2) the PACE program which is an adult face-to-face program offered in the evening on the Covington and Grant County campuses, and 3) completely online. For more information on the

PACE program, contact the Distance Learning office at 859-572-1500 or at nku.edu. For information on all other delivery modes, contact the program coordinator.

## Certificate in Organizational Leadership

Studies for the Certificate in Organizational Leadership include learning contemporary techniques of interpersonal relations, human resource management, teamwork, and leadership in organizations. Instructional topics include elements of communication and motivation in organizations, plus classical and contemporary theories of leadership. Individuals who earn this certificate will have a firm understanding of self vs. others in a team-oriented, organizational environment and a firm understanding of the attributes and behavior of successful leaders.

The Organizational Leadership certificate will be awarded upon successful completion of the following courses:

LDR 117 Introduction to Supervision
LDR 305 Human Relations in Organizations
LDR 308 Leadership in Organizations
LDR 315 Personnel Management
LDR 395 Teamwo

## Military Programs

## AIR FORCE ROTC

The Department of the Air Force at the University of Cincinnati, in cooperation with NKU, provides the opportunity for qualified students to enroll in the Air Force Reserve Officer Training Corps (AFROTC) Commissioning program. Upon graduation and successful completion of the program, the student will be commissioned as an officer in the U.S. Air Force. The Air Force courses are taught on the UC campus and may be taken through the Greater Cincinnati Consortium of Colleges and Universities. For further information on scholarships and the AFROTC program, contact the Department of the Air Force at the University of Cincinnati, 513-556-2237.

## ARMY ROTC

The Department of Military Science (Army) at Xavier University, Cincinnati, in cooperation with NKU provides the opportunity for any qualified student to enroll in the Army's military science commissioning program. Military science classes are presented on the Xavier University campus with many scholarship opportunities. Upon graduation and successful completion of the military science program, students will be commissioned as second lieutenants in the United States Army. No obligation for military service is required during the first two years of the program. For information, contact Army ROTC at Xavier University at 513-7451062.

## PRE-PROFESSIONAL PROGRAMS

Students who desire to apply to professional schools of dentistry, medicine, pharmacy, veterinary medicine, engineering, forestry, optometry, wildlife management, or law should consult with the appropriate preprofessional adviser. Normally a student in a pre-professional program who wishes to receive a degree from NKU must fulfill the requirements listed in this catalog under "Requirements for degrees." However, under certain circumstances, the first year of work at a professional school may be applied toward the degree at NKU (see, elsewhere in this catalog, "Transfer of credit from post-bachelor's institutions to NKU bachelor’s programs").

The following are the usual minimum requirements for admission to the respective professional schools (" 1 semester" refers to at least 3 semester hours of credit; "1 year," to at least 6 semester hours).

## Pre-Dentistry and Pre-Medicine

Most students complete an undergraduate program before attending dental or medical school. Exceptional students may gain entrance after three undergraduate years. Students fulfilling the basic requirements below may be accepted with almost any major. Usually, pre-dental or premedical students major in sciences such as biology, chemistry, or physics or in mathematics. For further details and suggested curricula, see under "Biological Sciences" or "Chemistry" in this catalog.

1 year English composition
1 year biology with laboratory
1 year physics with laboratory
1 year mathematics (calculus \& statistics)
1 year general chemistry with laboratory
1 year organic chemistry with laboratory
In their junior year, students must register with Northern's Pre-Medical Review Board to indicate intended application to medical or dental school. Information on the Board may be obtained from students' advisers.

## Pre-Pharmacy

Pre-pharmacy students will normally enter pharmacy school after two years of undergraduate work. If such students remain at NKU they may readily complete a major in biology or in chemistry in their third and fourth years. For further details and suggested curricula, see under "Biological Sciences" or "Chemistry" in this catalog.

1 year English composition
1 year biology with laboratory
1 year mathematics (calculus and statistics)
1 semester microbiology with laboratory
1 semester principles of economics
1 year physics with laboratory
1 year general chemistry with laboratory
1 year organic chemistry with laboratory

## Pre-Veterinary Medicine

Although Kentucky does not have a school of veterinary medicine, a limited number of students who are residents of Kentucky are selected to enter training in veterinary medicine at Auburn University, Auburn, Alabama, and Tuskegee Institute, Tuskegee, Alabama. These students are exempt from out-of-state tuition. Students generally need to have a gradepoint average (GPA) of at least 3.20 to be competitive for admission.

Most students require at least three years to complete the courses required for admission to veterinary schools. For further details and suggested curricula, see under "Biological Sciences" or "Chemistry" in this catalog.

1 year biology with laboratory
1 semester mathematics (calculus)
2 years chemistry including general chemistry and organic chemistry with laboratory

## Pre-Engineering

Northern Kentucky University, in conjunction with the University of Kentucky, offers students the opportunity to pursue a degree in agricultural, chemical, civil, electrical, mechanical, materials, or mining engineering. Similar arrangements exist with the Speed Scientific School at the University of Louisville. These agreements allow the same predictable transfer to UL as to UK but for a degree program that leads to Master of Engineering degree in any of chemical, civil, electrical, industrial, or mechanical engineering as well as a hybrid degree in engineering mathematics and computer science.

Pre-engineering students may elect to follow a three/two agreement that leads to the award of a degree in physics from NKU and the award of a degree in a field of engineering from the program and institution of choice. Alternatively, a student may elect to study at NKU for two years of course work then transfer to another institution to complete only requirements for the BS in a field of engineering in two years.

Most Pre-engineering students will be expected to complete at least this group of courses at NKU before transfer to a degree program in engineering:

1 year of English composition
1 year of university physics with laboratory
2 years of calculus and differential equations
1 year of chemistry
Courses in computer graphics, general education, and introduction to engineering and design

See program listing under "Physics and Geology"

## Pre-Forestry

See program listing under "Biological Sciences."

## Pre-Optometry

See program listing under "Biological Sciences."

## Pre-Physical Therapy

See program listing under "Biological Sciences."

## Pre-Physician Assistant

See program listing under "Biological Sciences."

## Pre-Wildlife Management

See program listing under "Biological Sciences."

## Pre-Law

No particular course of study is a prerequisite for admission to law school. The main guide to undergraduate studies should be the student's own interests and talents. Students considering law school may wish to consider the pre-law minor or the pre-law area of concentration offered by the Department of Political Sciences and Criminal Justice. Among the primary admissions factors considered by law schools are the GPA and the score on the law school admission test (LSAT). All pre-law students, regardless of major, are advised to consult with the University's pre-law adviser.

1 year English composition

## INTERDISCIPLINARY PROGRAMS

Administrative support for interdisciplinary studies and experimental courses is currently being provided through the Office of the Dean of Arts and Sciences. These offerings provide students and faculty with the opportunity to explore and develop subject areas and methods of inquiry otherwise not available within traditional disciplines of the University.

Because of the flexible nature of their curricula, these programs often undergo revision, and students interested in them are encouraged to contact the program directors, or the academic departments which sponsor the program, for current information on program requirements, options, and courses.

## Interdisciplinary Majors

ASSOCIATE DEGREE IN INTEGRATIVE STUDIES<br>Debra Meyers, Ph.D., director of integrative studies<br>College of Arts \& Sciences<br>BAIS@nku.edu<br>Advising Information: 859-572-5494; 859-572-1450

The Associate Degree in Integrative Studies is designed to meet the needs of students who are looking for academic accreditation of their employment skills; students who want to study a specific area; and students who have a limited time to complete their college courses. Students can complete a four-year degree in two-year segments, using the Integrative Studies Degree option for the first two years.

## ELIGIBILITY:

For entrance into the Associate of Arts in Integrative Studies program, a student must not have completed more than 48 credit hours.

## DEGREE REQUIREMENTS

Students seeking the Associate of Arts degree in Integrative Studies (AAIS) must complete all NKU graduation requirements including:

- General Education requirements, as outlined in the student's catalog.
- A minimum of 64 credit hours.
- A minimum 2.0 GPA overall.

In addition, the Integrative Studies degree requires a focus area in one of the following categories:

- Humanities
- Fine Arts
- Social/Behavioral Sciences
- Natural Sciences/Mathematics

The focus area must include:

- 6 credits of upper level coursework in the chosen area
- 9 additional credits of coursework in the chosen area
- courses from at least 2 different disciplines within the chosen area
- a grade of $C$ or better in each class

No course can be counted in both the general education core and in the focus area. This degree cannot be counted as a minor or area of concentration.

## BACHELOR'S DEGREE PROGRAMS

## ENVIRONMENTAL SCIENCE

Rebecca L. Evans, biological sciences, director
evansr@nku.edu
859-572-1409
The Environmental Science Program at Northern Kentucky University is an interdisciplinary program that provides those interested in environmental careers with a strong background in biology, chemistry, geology, mathematics, and physics. This multi-disciplinary background is combined with upper-division requirements that integrate the disciplines and emphasize the scientific study of environmental issues from a research and career oriented perspective. The inclusion of research or internships enables students to gain expertise and experience to monitor, analyze, and contribute to the solution of current environmental problems. These opportunities are provided by faculty from the Biology, Chemistry, Physics and Geology departments, the Center for Integrative Natural Science and Mathematics (CINSAM), the Center for Applied Ecology (CAE), industry and government agencies. Students graduating with a B.S. in Environmental Science are well equipped to join the ranks of other environmental professionals working with local, state and federal agencies, consulting firms, or non-profit organizations. They are also qualified to become part of a research team or pursue graduate study of environmental sciences.

## Program Policies:

Students will enter into the program as pre-Environmental Science majors. Upon completion of BIO 150/150L, BIO 151/151L, CHE 120/ 120L, CHE 121/121L, and either MAT 119 or STA 205, with a grade of C or higher, students may be admitted as Environmental Science majors. The degree of Bachelor of Science in Environmental Science will be conferred upon all students who complete all of the following course requirements with a grade of C or better.

## Bachelor of Science in Environmental Science Required Courses

BIO 150-150L Introduction to Biology I
BIO 151-151L Introduction to Biology II
BIO 304-304L General Ecology
CHE 120-120L General Chemistry I
CHE 121-121L General Chemistry II
CHE 310-310L Organic Chemistry I
CHE 311-311L Organic Chemistry II
ENV 110 Environmental Science and Issues
ENV 115 Orientation to Environmental Science Careers
ENV 255 Information Resources in Environmental Science
ENV 400 Environmental Science Seminar
GEO 306 Environmental Resource Management
GEO 318 Geographical Information Systems
GLY 120 This Dangerous Earth 3
GLY 340 Introduction to Environmental Geoscience 3
GLY 450 Hydrogeology with Laboratory 4
MAT 119 Pre-calculus Mathematics
STA 205 Introduction to Statistics I
PHY 211Geneal Physion
PHY 211General Physics with Laboratory I
PHY 213 General Physics with Laboratory II
One three-credit-hour Internship OR Directed Research

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Scientific research related to environmental problems can be conducted with Biology, Chemistry, or Geology faculty. Internship positions are available with a number of area organizations, government agencies and consulting firms.

## Electives

Select courses from the following list to complete a minor in Biology, Chemistry or Geology. A minor in one of these 3 key areas is considered a companion degree and is a requirement for graduation with a B.S. in Environmental Science.

ANT 345 Environmental Anthropology
BIO 302-302L General Microbiology with lab
BIO 410 Conservation Biology
BIO 422-422L Limnology
BIO 474 Microbial Ecology
CHE 340-340L Analytical Chemistry
CHE 440 Environmental Toxicology
ENG 347 Technical Writing
ENV 350 Environmental Toxicology
ENV 380 Field and Laboratory Methods in Environmental Science
ENV 494 Topics: Environmental Science
GEO 108 Physical Geography
GEO 308 Climatology
GEO 340 Sustainable Food Systems
GEO 394 Topics: Advanced Map Studies
GLY 315 Structural Geology
GLY 330 Geomorphology
GLY 341 Soil Science
GLY 455 Groundwater Resources and Management with Lab
PSC 403 Public Policy
SOC 355 Sociology of the Environment

## INTEGRATIVE STUDIES

Debra Meyers, Ph.D., director of integrative studies College of Arts and Sciences<br>BAIS@nku.edu<br>Advising Information: 859-572-5494; 859-572-1450

## Assessment

All graduating seniors in this program are required to submit a portfolio at the time their program is certified for graduation. Guidelines for the portfolio can be found on the Integrative Studies website. Performance on this assessment tool will have no bearing on the student's GPA or ability to graduate but will be used by the program for internal evaluation. However, students who do not turn in a portfolio will not be allowed to graduate.

## Grade Policy

No course in which a student earns a grade below $C$ can be used to fulfill the major course requirements.

## Integrative Studies

The Integrative Studies major in the College of Arts and Sciences provides the opportunity for students to pursue a broad-based education in the College of Arts and Sciences. The major is designed for students needing a flexible program of integrated and multidisciplinary study.

## The Inteagrative Studies major serves:

- students who prefer a broader and more flexible approach to their college education than is offered by traditional disciplinary majors.
- students whose primary educational goals demand integrated and multidisciplinary study.
- adult learners who have interrupted their studies for a prolonged period and return with a different academic focus and career goal.
- transfer students whose prior work does not mesh well with existing programs of study at NKU.
- part-time students whose work schedules and other responsibilities preclude them from completing more structured majors.
- students abandoning highly structured majors late in their undergraduate career.


## Curriculum

Students seeking the Bachelor of Arts degree in Integrative Studies (BAIS) must complete all NKU graduation requirements including:

- general education requirements completed within the first 60 hours of college level work;
- 45 upper-division hours;
- a minimum of 128 credit hours;
- a minimum 2.0 GPA.


## Additional BAIS major requirements include the following:

- Coursework drawn from four different disciplines or interdisciplinary programs. The four areas of study must include at least two from the College of Arts and Sciences. With approval of the program director, unique areas of concentration or minors may be substituted.
- Students must earn a $C$ or better in each course in their areas of study.
- No course can be counted in more than one area of study.
- Students must successfully complete at least one of the following capstone courses before submitting their portfolios:

IST 492 Directed Research
IST 494 Seminar: Advanced Topics in Integrative Studies IST 496 Internship
IST 499 Independent Study: Directed Readings

- Students will participate in outcomes assessment that includes a portfolio submission and exit survey.


## INTERNATIONAL STUDIES

Linda L. Dolive, political science, coordinator dolive@nku.edu
859-572-6593

Both a major and a minor are offered in international studies. A student in either is required to take a modern foreign language through the intermediate level.

A major in international studies, in addition to the above requirement, consists of 36 semester hours, including 15 semester hours of required courses and 21 semester hours of electives. The electives can be taken in six different patterns depending on the preference and career plans of the student. For students intending to pursue business careers, the University offers a business option. Students interested in a general background may select the social sciences options. Students with an interest in a specific region of the world may choose among the African, Asian, European, and Latin American options; they should fulfill their modern language requirement by taking a corresponding language. Program would be of interest to students planning a career in the public sector/foreign service, in an international agency, in international business, or to students pursuing graduate work in international studies. All students are encouraged to consider study abroad.

Students who desire a more flexible curriculum can work out 21 semester hours of electives with the coordinator of international studies.

A minor in international studies consists of 21 semester hours, including the same 15 semester hours required of the major and 6 semester hours of elective courses chosen in consultation with the coordinator of international studies.

## Required Courses (Major and Minor)

ANT 100 Cultural Anthropology
ECO 200 Principles of Macroeconomics
GEO 101 World Regional Geography (or GEO 102 Geography of the World's "Developed" Regions or GEO 103 Geography of the Third World)
PSC 102 Comparative Politics (or PSC 103 International Politics) PSC 470 The Post Cold War World

## Elective Options (Course prerequisites, if any, must be met)

African Option
ANT 240 Peoples of Africa
ANT 310 African Arts
GEO 403 Geography of Africa
HIS 335 History of Ancient Africa
HIS 336 History of Modern Africa
PSC 366 Government and Politics in Africa

Asian Option
ANT 385 Peoples of East and Southeast Asia
ART 104 Survey of Asian Art
GEO 410 Geography of Asia
HIS 330 History of China
HIS 331 History of Japan
PHI 250 Eastern Philosophy
POP 345 Japanese Popular Culture

## Business Option

ACC 200 Principles of Accounting I - Financial
ACC 201 Principles of Accounting II - Managerial
CTE 316 Inter-cultural Business Communications
ECO 201 Principles of Microeconomics
ECO 305 International Context for Business
ECO 340 International Economics
ECO 342 Economic Development
FIN 415 International Finance
FRE 250 Business French
GEO 303 Economic Geography
GER 250 Business German
MGT 360 Comparative International Management
PSC 410 Political Economy
SPI 250 Business Spanish

## European Option

ANT 370 Celtic Europe
FRE 310 French Culture and Society Today
FRE 311 French Cultural History
FRE 480 Topics in French Culture
GEO 402 Geography of Europe
GER 310 Contemporary German Life
GER 311 German Cultural History
GER 480 Topics in German Culture
HIS 308 Modern Europe 1870-1920
HIS 309 Modern Europe since 1920
HIS 355 English History, 1760 to present
HIS 363 History of Germany since 1870
HIS 377 Modern Russia since 1855
HIS 410 History of Modern France
HIS 413 History of Nazi Germany
HIS 414 The Holocaust
PSC 330 Politics of Europe
SPI 310 Spanish Culture and Civilization
Latin American Option
ANT/SOC 245 Peoples of Latin America
ANT 360 Indians of Mexico and Guatemala

GEO 406 Geography of Latin America
HIS 325 Early Latin American History
HIS 326 Modern Latin American History
HIS 436 Race Relations in the Americas, c. 1800 to Present
HIS 465 Nature and Development in Latin America
PSC 335 Latin American Politics
PSC 355 Comparative Revolutionary Politics
SPI 311 Spanish-American Culture and Civilization
SPI 480 Studies in Spanish-American Cultures and Civilizations
Social Science Option
ANT 201 World Cultures
ANT 270 Native Australia and Oceania
ANT 301/SOC 301 World Patterns of Race and Ethnicity
ANT 320 Religion and Culture
ANT 330 Women, Gender and Culture, a Global Perspective
ANT 358 Art and Culture
ANT 380 Origin of Civilization
CMST 355 Cross-Cultural Communication
EMB 370 International Media Systems
GEO 302 Cultural Geography
GEO 310 Geography of Populations
HIS 320 Colonial Experience in the Non-Western World
HIS 321 Modernization in the Non-Western World
HIS 329 History of the Middle East and North Africa
HIS 333 World Civilization from 1500
HIS 423 Diplomacy and Foreign Policy of the United States
HIS 425 History of American Diplomacy Since 1900
HIS 561 Modernization in the Non-Western World
HIS 565 The Vietnam War
PHI 160 World Religions
PSC 312 Modern Ideologies
PSC 338 U.S. Foreign Policy and the Developing World
PSC 382 Canadian Politics and Policies
PSC 394 Topics: Comparative Politics
PSC 394 Topics: International Politics
PSC 415 United States Foreign Policy
PSC 420 International Terrorism
PSC 480 International Law
PSC 481 International Organizations
PSC 485 Comparative Foreign Policy
PSC 486 War in the Modern World
REL 250 World Religions and Ethics
REL 305 Islam
WMS 383 Women and World Cultures
NOTE: Other courses carrying international studies credit will be listed in Schedule of Classes each semester and may be used as substitute electives on approval by the coordinator of international studies. In some of the above options, students should consider a summer term abroad.

## Interdisciplinary Minors

## AFRO-AMERICAN STUDIES

Michael Washington, history, director washington@nku.edu 859-572-6483
Offered by the Department of History and Geography, the minor in Afro-American studies is a student-centered, academic and community service project designed to provide students with an interdisciplinary perspective on the life of African Americans, Africans, and African people
throughout the diaspora and their contributions to humanity. Specifically, the program is designed to acquaint students with

1. the historical experience of Africans and African Americans from pre-colonial Africa to contemporary times;
2. contributions of Africans and African Americans to the humanities;
3. the study of the African American experience from a behavioral and/or social science perspective as well as contributions of Black people to these areas of study;
4. the influence of the African American experience in various professional fields.
To complete the minor, students must earn 24 semester hours of designated Afro-American studies courses with no more than 3 semester hours of directed readings or independent study. There are 12 semester hours required; of the remaining 12 semester hours, at least one course must be taken from each of the three required areas. At least a $C$ must be achieved to earn credit for a course. Specific requirements for this minor are the following.

## Required Courses

AFR 100 Introduction to Afro-American Studies*
HIS 106 History of African American to 1877*
HIS 107 HIstory of African Americans since 1877*
HIS 431 Historical Themes in African American History*

## Required Areas

History Option
AFR 494 Topics: Afro-American Studies
HIS 310 Colonial American to 1763
HIS 313 Expansion and Conflict, 1828-1861
HIS 316 Modern United States History since 1939
HIS 317 History of the New South
HIS 318 Current Events in a Historical Perspective (when applicable)
HIS 325 Early Latin American History
HIS 335 History of Ancient Africa
HIS 336 History of Sub-Saharan Africa since 1870
HIS 380 History and Film (when applicable)
HIS 417 Civil War and Reconstruction, 1860-1877
HIS 426 Historical Geography of the United States
HIS 427 Urban History of the United States
HIS 435 History of Race Relations in the Americas, 1492-c. 1800
HIS 436 History of Race Relations in the Americas, c. 1800 to Present
HIS 438 African-American Women's History and Culture
HIS 444 History of Women in the United States to 1900
HIS 445 History of Women in the United States since 1900
HIS 496 Internships: Public History (when applicable)
HIS 499 Seminars (when applicable)
HIS 533 Expansion and Conflict
HIS 535 Civil War and Reconstruction
HIS 539 Modern United States History since 1939
HIS 546 History of the American Family
HIS 552 History of the Old South
HIS 553 History of the New South
HIS 556 African Americans in U.S. Culture, Education, and Politics
HIS 561 Modernization in the Non-Western World
HIS 594 Topics: History (when applicable)

## Behavioral and Social Sciences/Social Work Option

AFR 494 Topics: Afro-American Studies
ANT 240 Peoples of Africa*
ANT 301 World Patterns of Race and Ethnicity
ANT 330 Women, Gender, and Culture, a Global Perspective
GEO 103 Geography of the Third World
GEO 309 Historical Geography of the United States
GEO 310 Geography of Population
GEO 403 Geography of Africa
GEO 492 Directed Research: Geography (where applicable)

GEO 594 Topics or Seminar: Geography (where applicable)
HNR 303 Honors Seminar: Humanity and the Imagination
HNR 306 Studies in Diversity
HSR 500 Multicultural Family Work: Principles and Practices
JUS 231 Race, Gender, and The Mass Media*
JUS 318 The African American, The Law and The Courts
JUS 321 Black Women, Crime and Politics
PSC 215 Race, Gender, and Politics
PSC 338 U.S. Foreign Policy in the Developing World
RTV 105 Race, Gender, and The Mass Media*
SOC 210 Analysis of Racism and Sexism in the United States*
SOC 300 Race and Ethnic Relations
SOC 301 World Patterns of Race and Ethnicity
SWK 307 The Human Experience II: Literary Perspectives
SWK 308 Social Work Research (when offered as Afrocentric Paradigm)

## Humanities and Creative Productions/Communication Options

AFR 494 Topics: Afro-American Studies
ENG 211 Survey of Women's Literature I*
ENG 212 Survey of Women’s Literature II*
ENG 217 African American Literature to 1940*
ENG 218 African American Literature, 1940-present*
ENG 300 American Women Poets *
ENG 305 American Women Writers*
ENG 354 Southern Women Writers
ENG 467 Topics: African American Literature*
MUS 107 Survey of African American Music*
MUS 110 Appreciation of Jazz *
MUS 254 Women in Music in Europe and America II: The 20th Century
PHI 394 Topics: Philosophy (where applicable)
REL 325 African American Religious Experience in America*
REL 394 Topics Religious Studies (when offered as The Ethics and Theology of Martin Luther King Jr., and Malcolm X)
SPE 350 Rhetoric of Minority Groups
SPE 355 Cross-Cultural Communication
TAR 102 Survey of Race and Gender in Dramatic Literature*
TAR 452 Special Problems in Theatre (literature) (when applicable)
*these courses satisfy the general education requirements in the areas of History, Literature, Fine Arts, Humanities, Social Sciences, Non-
Western, or Race/Gender

All internships, independent study, and directed reading courses must relate to the area of Afro-American studies and may be applied to the minor upon prior approval of the director.

Introduction to Afro-American Studies (AFR 100) fulfills the general education requirement in non-Western perspective or the general education requirements in either social sciences or race/gender.

## CHINESE STUDIES

Tom Leech, world languages and literatures, coordinator
leech@nku.edu
859-572-5514

Offered by the Department of World Literatures and Languages, the minor in Chinese Studies gives students the opportunity to gain knowledge of the Chinese people and their culture in an international context. The program, with coursework selected from several disciplines, provides a broad understanding of a nation and culture of great and growing significance to world affairs. To complete the minor, students must earn a minimum of 23 semester hours of credit, distributed as follows:

## Proficiency in Chinese (0-14 hours)

Students must either complete Chinese 202 and all necessary prerequisites or demonstrate to the satisfaction of the coordinator that they
have an equivalent level of proficiency. The Chinese faculty will determine appropriate course placement.
At least two of the following: (6-12 hours)
ARTH 104 Survey of Asian Art
ENG 216 Studies in Non-Western Literature (Topic: Chinese Literature)
HIS 330 History of China
PHI 250 Eastern Philosophy
Elective Courses (0-17 hours)
ANT 380 Origins of Civilization
CHI 350 Methods of Teaching Chinese
CHI 380 Topics in Advanced Chinese
GEO 385 Peoples of East and Southeast Asia
GEO 410 Geography of Asia
HIS 332 World Civilizations to 1500
HIS 333 World Civilizations since 1500
REL 250 World Religions and Ethics
PHI 350 Philosophy of Religion
PSC 410 Political Economy
Other acceptable elective courses with the consent of the minor coordinator

PSC 394 Topics: International Politics
PSC 394 Topics: Comparative Politics
REL 201 Ideas in Religious Studies
SOC 340 Population
SOC 360 Technology and Social Change

## Teacher Certification

Students seeking teaching certification in Chinese must complete CHI 201, CHI 202, CHI 350, fifteen hours of CHI 380 including one linguistics topic, and two of the following interdisciplinary electives: ARTH 104, ENG 216, GEO 410, HIS 330, PHI 250, PSC 394, and SOC 340. Students must complete all education and general education courses.

## ENVIRONMENTAL STUDIES

> Rebecca L. Evans, biological sciences, director evansr@nku.edu $859-572-1409$

Offered by the Department of Biological Sciences, the minor in environmental studies is designed to provide students with a coherent academic program that is sensitive and responsive to current and projected environmental problems facing the human community on a variety of levels. As a minor program, it is intended to broaden and strengthen a number of major programs by providing a useful focus on a wide range of environmental issues.

The environmental studies minor requires completion of 22 credit hours: 10 credit hours in BIO 123 or ENV 110, ENV 396, ENV 400 and PSC 403 (Public Policy) and 12 credit hours from the following electives:

ANT 345 Environmental Anthropology
BIO 304/304L General Ecology with Lab
CHE 112/112L Chemistry and Society
ENV 115 Orientation to Environmental Careers
GEO 306 Environmental Resource Management
GEO 314 Maps and Map Interpretation
GEO 318 Geographic Information Systems
GEO 340 Sustainable Food Systems
GEO 394 Topics: Advanced Map Studies
GLY 120 This Dangerous Earth
GLY 240 Geology of Natural Resources
IET 260 Industrial Environmental Control
IET 323 Land Planning and Development
IET 423 Planning and Design of Industrial Facilities
PHI 302 Ethics and Science
PHI 360 Topics: Environmental Philosophy
SOC 340 Population
SOC 355 Sociology and the Environment

## HEALTH CARE

Terry G. Pence, philosophy, director<br>pence@nku.edu<br>859-572-5594

The minor in health care consists of 23 semester hours, including 11 semester hours of core courses, 6 semester hours from the sociology or psychology option, and 6 semester hours of elective courses.

## Core Courses

BIO 208 Human Anatomy and Physiology I
BIO 208L Human Anatomy and Physiology l: Laboratory
BIO 209 Human Anatomy and Physiology II
BIO 209L Human Anatomy and Physiology ll: Laboratory
PHI 220 Health Care Ethics

## Psychology Option

PSY 100 Introduction to Psychology
PSY 220 Lifespan Development

## Sociology Option

SOC 100 Introductory Sociology
SOC 213 Sociology of Aging
Students taking the psychology option may choose electives from psychology, human services/mental health, or philosophy; students taking the sociology option may choose from sociology, human services/mental health, or philosophy; those taking EDU 300 Human Growth and Development instead of PSY 220 may choose electives from human services/ mental health or philosophy.

## Electives (6 hours)

Human Services/Mental Health (3 semester hours each)
HSR 300 Contemporary Issues in Mental Health
HSR 314 Death, Dying and Grief
HSR 340 Alcoholism: Issues and Intervention
Philosophy (3 semester hours each)
PHI 303 Philosophy and Psychotherapy
PHI 311 Philosophy of Women
PHI 370 Ethics and the Nursing Profession
Psychology (3 semester hours each)
PSY 320 Psychology of Adult Development
PSY 333 Abnormal Psychology
PSY 340 Social Psychology
PSY 405 Counseling Psychology
Sociology (3 semester hours each)
SOC 303 Social Psychology
SOC 315 Marriage and the Family
SOC 450 Medical Sociology

## INTERNATIONAL STUDIES

Linda L. Dolive, political science, coordinator dolive@nku.edu
859-572-6593
Both a major and a minor are offered in international studies. A student in either is required to take a modern foreign language through the intermediate level.

A minor in international studies consists of 21 semester hours, including the same 15 semester hours required of the major and 6 semester hours of elective courses chosen in consultation with the coordinator of international studies. See International Studies Major for requirements.

## JAPANESE STUDIES

Linda L. Dolive, political science, coordinator
dolive@nku.edu
859-572-6593
The minor in Japanese studies offers students the opportunity for a detailed examination of various aspects of the Japanese people and their

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activities. The program, selected from several disciplines, provides a broad appreciation of a nation and culture of great and growing significance in world affairs. To complete the minor, students must earn a total of 26 semester hours selected from the following.

ANT 385 Peoples of East and Southeast Asia
ARTH 104 Survey of Asian Art
ARTH 359 Arts and Crafts of Japan
ENG 216 Studies in Non-Western Literature (Japanese option)
JPN 101 Elementary Japanese I
JPN 102 Elementary Japanese II
JPN 201 Intermediate Japanese I
JPN 202 Intermediate Japanese II
JPN 280 Intermediate Individualized Instruction in Japanese
JPN 350 Methods of Teaching Japanese
JPN 380 Topics in Advanced Japanese
GEO 410 Geography of Asia
HIS 331 History of Japan
PHI 250 Eastern Philosophy
PSC 394 Topics: International Politics (Japanese Topic)
PSC 394 Topics: Comparative Politics (Japanese Topic)
REL 201 Ideas in Religious Studies (Japanese Topic)
REL 250 World Religions and Ethics
POP 394 Japanese Popular Culture
Students seeking teaching certification in Japanese must complete JPN 201, JPN 202, JPN 350, fifteen hours of JPN 380 including one linguistics topic, and two of the following interdisciplinary electives: ARTH 104, ENG 216, GEO 410, HIS 331, PHI 250, PSC 394, and POP 345. They must complete all education and general education courses.

## LATIN AMERICAN AND CARIBBEAN STUDIES

Adalberto J. Pinelo, political science, coordinator pinelo@nku.edu 859-572-5323

Through the political science program, NKU offers an undergraduate minor in Latin American Studies. This minor enables students to develop an integrated understanding of the history, culture, and politics of Latin America. Students entering the program can pursue any major and at graduation will receive a certificate attesting to successful completion of the program.

The requirement for this minor is 21 semester hours, including one Latin American course each from Political Science, History, Geography, and Anthropology, plus 9 additional semester hours of elective courses dealing with Latin America or with the Spanish language.

All students pursuing this minor should acquire some competence in Spanish. Questions regarding the minor can be addressed to the coordinator.

The following courses may be applied toward the minor in Latin American studies.

Anthropology
ANT 245 Peoples of Latin America
ANT 352 Archaeology of Mesoamerica
ANT 360 Indians of Mexico and Guatemala
Geography
GEO 406 Geography of Latin America
History
HIS 325 Early Latin American History
HIS 326 Modern Latin American History
Political Science
PSC 335 Latin American Politics
PSC 355 Comparative Revolutionary Politics
Sociology
SOC 245 Latin American Societies
Spanish
SPI 101 Elementary Spanish I
SPI 102 Elementary Spanish II
SPI 201 Intermediate Spanish I

SPI 202 Intermediate Spanish II
SPI 250 Business Spanish
SPI 311 Spanish-American Culture and Civilization
SPI 321 Survey of Spanish-American Literature
SPI 499 Independent Study of Spanish

## PRE-LAW

Julie B. Raines, assistant professor
Department of Political Science and Criminal Justice
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Bruce McClure, Lecturer and Pre-Law Advisor
Department of Political Science and Criminal Justice
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859-572-5830
This minor is offered by the Department of Political Science and Criminal Justice; however, students majoring in any program can minor in Pre-Law. The minor in Pre-Law provides a coherent grouping of courses in the foundations and applications of the law. Specifically, the program is designed to acquaint students with:

1. different approaches to the study of law, including philosophical, sociological, political, and historical;
2. the elements of legal reasoning;
3. a body of case law in substantive areas;
4. and the skills necessary to succeed in a law school program including logic, research, writing, reading, and analytical thought.
The Pre-Law Minor provides students who major in non-law-related fields and who apply to law school some exposure to legal courses before pursuing their professional education. The minor in Pre-Law does not guarantee successful admission into law school, nor is it a prerequisite for law school.

In preparation for the Pre-Law Minor, students should have a firm understanding of basic logic, legal research, ethics, writing, macroeconomics, courts, and evidence. To that end, it is recommended that students take all of the following courses as part of their general education requirements and/or as electives prior to completing the Pre-Law Minor. However, only two of these courses serve as pre-requisites for the minor.

ECO 201 Principles of Microeconomics
ENG 291 Advanced College Writing
JUS 203 The Criminal Court System
JUS 205 Criminal Evidence
JUS 210 Legal Research ** (pre-requisite for the minor)
JUS 231 Race, Gender and Crime
PHI 155 Intro to Ethics
PHI 165 Intro to Logic** (pre-requisite for the minor)
Students are required to take at least 24 hours from the following list of courses to complete the Pre-Law Minor:

ECO 301 Intermediate Microeconomics
ENG 331 Persuasive Writing
or ENG 340 Business Writing
ENG 301 American Novel
or ENG 306 Multicultural American Literature
or ENG 315 Bible as Literature
HIS 311 The War for Independence and the Constitution 1763-1798 or HIS 312 Federalist United States,1789-1828
or HIS 589 Anglo-American Legal History
JUS 302 Criminal Law
JUS 303 Criminal Procedure
or JUS 313 Rights of the Convicted
or JUS 318 African American Law and Courts
PHI 320 Social and Political Philosophy
or PHI 330 Philosophy and the Law

PSC 304 Introduction to the Law
PSC 305 The Judicial Process
PSC 307 Constitutional Law
or PSC 308 Civil Liberties
PCS 480 International Law
or PSC 309 Law of Mass Communication
or SOC 455 Comparative Criminal Justice
or PSC 394 Special Topics (with coordinator approval)
PSY 340/SOC 303 Social Psychology
SOC 305 Criminology
or SOC 381 Deviance and Social Control

## MEDIEVAL STUDIES

Tamara O'Callaghan, English, coordinator ocallaghant@nku.edu 859-572-6977
The minor in medieval studies is historical in perspective with emphasis on cultures of western Europe from the fifth to the fifteenth centuries. The minor is interdisciplinary in scope, with courses from art, English, history, language, music, philosophy, and political science included in its curriculum. The medieval studies minor introduces students to methods, materials, and texts reflecting the human dimension of medieval cultures and the living heritage of medieval cultures in modern civilization.

The minor in medieval studies requires completion of 24 semester hours in designated courses. MDS 201 and MDS 401 are required, and the remaining 18 semester hours must be selected from three disciplines and must include at least one semester of the study of Latin.

## Required Courses

MDS 201 Introduction to Medieval Studies
MDS 401 Medieval Studies Seminar

## Elective Courses

ARTH 101 Survey of Western Art I
ARTH 351 Medieval Art
ENG 401 Chaucer
ENG 402 Middle English Literature
ENG 403 Old English
ENG 590 Studies in Literature (if medieval topic)
HIS 303 Europe in the Middle Ages
HIS 353 English History to 1485
HIS 442 History through Biography (if medieval topic)
HIS 499 Independent Study: European History (if medieval topic)
LAT 101 Elementary Latin I
LAT 102 Elementary Latin II
LAT 201 Intermediate Latin I
LAT 202 Intermediate Latin II
LAT 280 Topics in Latin Language and Literature
MUS 230 History of Music I
PHI 180 History of Classical and Medieval Philosophy
PSC 370 Pre-Enlightenment Political Theory

## MIDDLE EASTERN AND NORTH AFRICAN STUDIES

Linda L. Dolive, coordinator<br>dolive@nku.edu<br>859-572-6593

The minor in Middle Eastern and North African studies offers students the opportunity to gain a knowledge of various aspects of the peoples of the Middle East and North Africa. The program, selected from several disciplines, provides a broad appreciation of the societies, literatures, cultures, religions, and history of the Middle East and North Africa and their significance for the modern world. To complete the minor, students must earn a total of twenty-three hours selected from the courses listed below. Applicable course prerequisites must be met. Substitutions may be approved by the program coordinator.

ARI 101 Elementary Arabic I
ARI 102 Elementary Arabic II
ARI 201 Intermediate Arabic I
ARI 202 Intermediate Arabic II
ARI 350 Methods of Teaching Arabic
ARI 380 Topics in Advanced Arabic
ENG 313 Arabic and Middle Easter Literature in Translation
ENG 315 The Bible as Literature
GEO 594 Geography of the Middle East and South Asia
HIS 329 History of the Middle East and North Africa
PSC 102 Comparative Politics
PSC 103 International Politics
PSC 338 U.S. Foreign Policy in the Developing World
PSC 486 War in Modern World
PSC 394 Topics: International Politics (Middle Eastern topic)
PSC 394 Topics: Comparative Politics (Middle Eastern topic)
REL 181 Survey of the Hebrew Bible (Old Testament)
REL 182 Survey of the New Testament
REL 186 Introduction to Judaism
REL 201 Introduction to Islam
REL 305 Islam
Students seeking teaching certification in Arabic must complete ARI 201, ARI 202, ARI 350, fifteen hours of ARI 380 including one linguistics topic, and two of the following interdisciplinary electives: ENG 313, HIS 329, PSC 394, and REL 305. They must complete all education and general education courses.

## NATIVE AMERICAN STUDIES

Sharlotte Neely, anthropology, director<br>neelys@nku.edu<br>859-572-5258 or 5259

The minor in Native American Studies is designed to give students an overview of American Indian life and cultures from prehistoric times to the present with a focus on North America. Because of the overlap in courses, students majoring in anthropology who choose to minor in Native American Studies must also have a second major or minor or an area of concentration outside the anthropology program.

The minor in Native American Studies consists of 21 semester hours and requires completion of the following:

1. Four core courses: Cultural Anthropology (ANT 100), North American Indians (ANT 230), Modern American Indians (ANT 231), and North American Archaeology (ANT 350).
2. Three of the following: World Patterns of Race and Ethnicity (ANT/SOC 301,Prehistoric Ecology (ANT 318), Archaeology of Mesoamerica (ANT 352), Anthropology and the Arts (ANT 358), Indians of Mexico and Guatemala (ANT 360), Diversity Mapped (GEO 107), Plains Indians (HIS 416), History of the Indians of the United States (HIS 557), or any appropriate course approved by the department chair, for example: Museum Methods (ANT 307) or Ethnographic Methods (ANT 340) if the student chooses a Native American emphasis, or Topics: Studies in Anthropoloyg (ANT 294) or Topics in Anthropology (ANT 394) if a Native American focus or topic is emphasized.

## NEUROSCIENCE

Mark E. Bardgett, psychology, director bardgettm@nku.edu

859-572-5591
Neuroscience represents an emerging integrative scientific discipline that seeks to: 1) better understand nervous system structure and function, and 2) use this knowledge to better understand mental processing and behavior. In addressing these goals, neuroscience borrows from an array of disciplines including physics, chemistry, biology, psychology, computer science, philosophy, anthropology, mathematics, pharmacology, and education. In turn, the knowledge gained through neuroscience research can advance the fields of medicine, biology, pharmacology, psychology,

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education, social work, forensics, marketing, and computer science among others.

Students participating in the minor program will be introduced to a variety of perspectives on the field of neuroscience. These perspectives include neurobiology, evolution of mind/brain, theories of mind, behavioral neuroscience, psychopharmacology, cognitive science, computational neuroscience, animal behavior, cognitive science, linguistics, and perception. The neuroscience minor may be an attractive addition to a major in natural science, mathematics and computer science, social science, or humanities, and should enable students to address issues and dilemmas in their major field from a neuroscience perspective. It may also better prepare students who are considering graduate study in fields impacted by neuroscience, such as medicine, psychology, education, chemistry, biology, pharmacology, computer science, philosophy, and social work.

The minor requires a minimum of twenty-two hours of coursework. These include ten hours of required courses and an additional twelve hours of electives. Students are required to take PSY 311, PHI 345, and NEU 493 and one of three core electives. Students must choose four other elective courses. Three of these electives must come from outside of the student's major. Students must earn a C grade or better in all courses applied toward certification of the minor. Students are strongly encouraged to take BIO 150-151 prior to or at the beginning of their coursework in the minor. Students cannot take CSC 325 after taking CSC 425. Psychology majors may only apply six hours of minor course work to their major.

## Required Courses:

PSY 311 Biopsychology
PHI 345 Philosophy of Mind
NEU 493 Cognitive Neuroscience Seminar

## One of the following:

BIO 245 Neurobiology
CSC 325 Introduction to Neural Networks and Artificial Intelligence
PSY 338 Cognitive Processes

## Elective Courses (12 hours)

ANT 202 Physical Anthropology
ANT 275 Language and Culture
ANT 363 Language and Thought
ANT 371 Psychological Anthropology
BIO 245 Neurobiology
BIO 251 Genetics, Molecular, and Cell Biology I
BIO 252 Genetics, Molecular and Cell Biology II
BIO 440 Animal Behavior
BIO 467 Endocrinology
CSC 325 Introduction to Neural Networks \& Artificial Intelligence
CSC 425 Artificial Intelligence
CSC 485 Theory of Computation
ENG 381 Introduction to Linguistics
PHI 165 Introduction to Logic
PHI 306 Philosophy and Science
PHI 302 Ethics and Science
PSY 309 Psychology of Perception
PSY 333 Abnormal Psychology
PSY 337 Animal Learning
PSY 338 Cognitive Processes
PSY 360 Psychopharmacology
Other acceptable elective courses with consent of minor director:
HNR 301/PHI394 Special Topics: Androids, Zombies and Brains
HNR 302/PSY 494 Special Topics: Drug Policy
HNR 303 The Dream of a Perfect Language
PHI 315 Knowledge and Reality
PHI 340 Contemporary Anglo-American Philosophy

ANT 499, BIO 492, CHE 492, CSC 499, HNR 491, PHI 499,
PSY 492 Directed Research/Independent Study

## RELIGIOUS STUDIES

Robert Kenney, philosophy and religious studies, assistant coordinator kenneyr@nku.edu 859-572-6909
Offered by the Philosophy Program, the minor in religious studies is designed for students who are especially interested in religious studies or who wish for career purposes to add to their general education background. The minor requires 21 semester hours, including at least 6 hours from category A and at least 3 hours each from categories B and C
A. Religious Traditions and Sacred Texts

PHI 160 World Religions
REL 181 Survey of the Hebrew Bible (Old Testament)
REL 182 Survey of the New Testament
REL 185 Survey of Christianity
REL 186 Introduction to Judaism
PHI 201 Ideas in Philosophy (when topic applies)
REL 201 Ideas in Religious Studies (when topic applies)
PHI 250 Eastern Philosophy
PHI 304 Zen
REL 305 Islam
PHI 394 Topics in Philosophy (when topics apply)
REL 394 Topics in Religious Studies (when topic applies)
B. Philosophical, Theological and Ethical Perspectives

PHI 201 Ideas in Philosophy (when topic applies)
REL 201 Ideas in Religious Studies (when topic applies)
REL 250 World Religions and Ethics
REL 260 Human Religious Experience
PHI 323 Peace and War
PHI 325 Philosophy of Non-Violence
REL 330 Contemporary Religious Thought
PHI 350 Philosophy of Religion
REL 370 Religion and Science
PHI 394 Topics in Philosophy (when topic applies)
REL 394 Topics in Religious Studies (when topic applies)
C. Historical, Literary and Scientific Perspectives

PHI 201 Ideas in Philosophy (when topic applies)
REL 201 Ideas in Religious Studies (when topic applies)
ENG 215 Greek and Roman Mythology
HIS 300 The Ancient Near East and Greece to the Macedonian Conquest
HIS 301 The Hellenistic World and Rome to the Death of Constantine
HIS 305 Reformation Europe
ENG 315 The Bible as Literature
ANT 320 Religion and Culture
REL 320 Religion in America
REL 325 African American Religious Experience in America
GEO 330 Geography of Religion
PHI 394 Topics in Philosophy (when topic applies)
REL 394 Topics in Religious Studies (when topic applies)
SOC 430 Sociology of Religion
PSY 494 Psychology of Religion

## SOCIAL JUSTICE STUDIES

Willie Elliott; counseling, social work and human services; coordinator elliott@nku.edu 859-572-5559
Social Justice is an interdisciplinary area of study that focuses on issues of equity and fairness in the distribution of power, privilege, and resources in human societies. Issues in social justice can include any of the differences that have been used to divide members of society and distribute
the basic elements of human existence on an unequal basis. Issues may include, but are not limited to, race, sex, class, ethnicity, gender identity, and age. Courses not only explore violations of social justice, but also examine reactions to these violations and seek out ways to resolve them.

## Program Goals for Social Justice Studies

1. To develop an understanding and appreciation for diversity with equity.
2. To develop an awareness of how social justice relates to every academic discipline
3. To be able to analyze the historical antecedents of racism and other forms of oppression, and the patterns and processes of power, privilege, and social inequality.
4. For students to understand their responsibilities and commitment to social justice, social reform, and advocacy both historically and in contemporary times.
5. To integrate theoretical and empirical knowledge of oppressed groups into effective social justice strategies.
6. To demonstrate increased critical self-awareness of one's role and responsibility to achieve a just society.
7. To identify ethical dilemmas and anti-racist strategies implicated in the resolution of social inequity.

## Requirements for the Minor in Social Justice Studies:

The minor requires that students complete a minimum 21 hours in courses focusing on Social Justice. In completing this requirement, students must take:

SWK 394 Topics in Social Work: Social Justice
A minimum of 3 hours in each of the 3 subfields of study listed below.
Though some courses may appear in more than one category, a course may only be counted toward the distribution requirement in one subfield.
9 additional semester hours drawn from any of the subfields.
Subfield: American Studies (Examining issues for people in the Americas)

AFR 310 Afro American Law and the Courts
ANT 231 Modern American Indians
ANT 360 Indians of Mexico and Guatemala
ENG 210 Survey of African American Literature
GEO 309 Historical Geography of the United States
HIS 325 Colonial Latin America
HIS 326 Recent Latin America
HIS 431 Historical Themes in African American History
HNR 302 Humanity and Society (if focus is in the Americas)
HNR 306 Studies in Diversity (if focus is in the Americas)
REL 325 African American Religious Experience
RTV 325 Popular Culture and Mass Media
SWK 494 Multicultural Issues in Early Childhood Settings
SOC 205 Current Social Issues
SOC 300 Race and Ethnic Relations
Subfield: World Studies (Examining issues for people throughout the world)

ANT 275 Language and Communication
ANT 301 World Patterns of Race and Ethnicity
GEO 310 Geography of Population
GEO 410 Geography of Asia
HIS 336 Africa Since 1870
HIS 413 History of Nazi Germany
HIS 414 The Holocaust
HNR 302 Humanity and Society (if focus is global)
HNR 306 Studies in Diversity (if focus is global)
PHI 323 Peace and War
PHI 325 Philosophy of Nonviolence
SOC 301 World Patterns of Race and Ethnicity

Subfield: Gender Studies (Examining issues based on sex, sexuality, and sex roles)

HIS 444 History of Women in the United States to 1900
HIS 445 History of Women in the United States since 1900
HNR 306 Studies in Diversity (if focus gender-based diversity)
SOC 210 Analysis of Race and Gender
WMS 310 Women, Wages, and Work
WMS 381 Women and Literature (with approval)
WMS 382 Women and Society (with approval)
WMS 383 Women and World Cultures (with approval)
WMS 386 Women and the Law (with approval)
9 additional semester hours drawn from any of the subfields.
Courses taught with rotating topics, such as WMS 381 or HNR 302, and special topics courses listed under departmental headings, such as ANT 394 Topics in Anthropology, may also count toward the minor. Such courses must be approved by the director. Approval for the minor will be based on course content and pedagogy.

Students may also apply any of the courses approved for the certificate (listed below) towards the completion of the 21 hours for the minor. Topics for student research and/or student placement for field experience must be related to issues of social justice and approved by the director.

## Requirements for the Certificate in Social Justice Studies

In order to eligible for a formal certificate in Social Justice Studies a Student must complete the following requirements:

Complete all requirements of the minor.
Complete an approved 1-hour course of Independent Study by participating in the People's Institute For Freedom and Beyond. This weekend seminar, held annually on campus, provides students with training in com-munity-based social justice work.

Complete a course requiring a minimum of 40 hours of Community Action/Experiential Learning drawn from the list below.

ANT 325 Applied Anthropology
ANT 461 Research Practicum
SOC 322 Applied Sociology
SOC 461 Research Practicum
SWK 105 Community Experience in the Social Services
SWK 306 Field instruction 1
SWK 405 Social Work Practice: Community Organization
Students should be aware that some courses have prerequisites and/or corequisites that students may have to meet. No student should assume that these requirements would be waived. Research topics and placements for field experiences must be related to issues of social justice and approved by the director.

## WOMEN'S AND GENDER STUDIES

## Nancy Slonneger Hancock, philosophy, director hancockn@nku.edu <br> 859-572-5892

Northern Kentucky University's Women's and Gender Studies Program offers both an undergraduate minor and area of concentration. Through a cohesive curriculum exploring feminism, feminist theory, and social and political issues surrounding race, ethnicity and gender, the WGS Program introduces students to the history of women, their social, cultural and scientific contributions, as well as stressing the importance of social responsibility, activism, and community outreach. The program supports and sponsors both on- and off-campus events relevant to women's social, cultural and political issues with a strong sense of commitment to women in the metropolitan region.

The Northern Kentucky University Women's and Gender Studies Program is multidisciplinary; its faculty are drawn from diverse programs throughout the university, offering students a rich variety of disciplinary approaches to feminism and gender studies. The Women's and Gender Studies Program is located in FH 328 and can be reached by calling 859-

572-5550 or by e-mailing wgs@nku.edu.

## Minor in Women's and Gender Studies

The minor in women's and gender studies offers undergraduate students an integrated series of courses reflecting the new scholarship on women, the study of women, their contributions to society, and their changing roles. This program has the following objectives:

1. To study the contributions in each discipline made by women in society.
2. To promote research regarding women's past, present, and future contributions to society.
3. To analyze the changing roles of men and women in society.
4. To study possible social changes and reactions to the changing roles of women and men.
5. To study special problems faced by women in the labor force, under the law, and in social situations.
6. To gain a cross-cultural perspective on women and to learn about new role possibilities for women.
7. To study normative values relevant to a women's movement.

The Women's and Gender Studies minor requires a total of 21 semester hours.

Two of the following three courses are required:

- WGS 150 Introduction to Women's Studies;
- WGS 494 Seminar in Women’s Studies;
- WGS 499 Independent Study

WGS 494 or WGS 499 shall serve as a capstone course. In addition to the two chosen above, five additional courses of those listed below must be successfully completed for a total of 21 semester hours. (One of these may be the third of those listed above.)

## Area of Concentration

To complete an area of concentration in Women's and Gender Studies, students must take at least 12 semester hours of the coursework designated below at the 300-level or above.

## Approved Courses

In addition to all WGS courses, the following may be applied to the women's studies minor and area of concentration:

## ANT 273 Race, Gender, and Culture

ANT 330 Women, Gender and Culture: A global Perspective ARTH 349 Women and Art

EDU 316 Racism and Sexism in Educational Institutions
ENG 211 Survey of Women's Literature I
ENG 212 Survey of Women's Literature II
ENG 300 American Women Poets
ENG 305 American Women Writers
ENG 355 Women's Autobiographical Writing
ENG 465 Southern Women Writers
HIS 444 History of Women in the United States to 1900
HIS 445 History of Women in the United States since 1900
HIS 546 History of the American Family
JOU 335 Women in Mass Media
JUS 231 Race, Gender, and Crime
MUS 253 Women in Music in Europe and America I: 1800-1900
MUS 254 Women in Music in Europe and America II: The $20^{\text {th }}$ Century
NRP 275 Race, Gender, and Health Issues
PHI 170 Philosophy and Sexuality
PHI 311 Philosophy of Women
PHI 360 Topics in Environmental Philosophy (when offered as Environmental Feminism)
PSY 201 Psychology of Race and Gender
PSY 205 Psychology of Human Sexuality
SOC 110 Introduction to Race and Gender
SOC 315 Marriage and the Family
SOC 350 Women and Crime
SWK 307 Human Behavior and the Social Environment
SWK 520 Services to Women

NOTE: All WGS courses apply toward the minor. Other courses, such as topic and seminar courses, may apply toward the minor or an area of concentration in Women's and Gender Studies at the discretion of the program director.

In order for any of the above courses to count toward a student's program certification, the student must declare the Women's and Gender Studies minor or area of concentration in the Registrar's Office.

## CENTERS AND INSTITUTES

## Center for Applied Ecology

## FACULTY

Barry Dalton, executive director
Larry Brewer, Scott Fennell, Mark Leopold, Jessica Metzger, Nancy Meyer, Devin Schenk, Kim Tromm

The Center for Applied Ecology is located at 510 Johns Hill Road, 859-572-1999. The Center is open Monday through Friday from 8:30 a.m. to 5:00 p.m.

The Center for Applied Ecology of Northern Kentucky University (NKU) provides professional, science-based ecological services to the local community while offering practical work experience to NKU students. Established in 1999 as a non-profit, the Center has evaluated,
restored and helped protect some of the most ecologically significant forest, wetland, and aquatic ecosystems in the Northern Kentucky/Greater Cincinnati region. Committed to the wise use, protection, and restoration of native ecosystems and biodiversity, the Center seeks innovative solutions to address the region's environmental concerns.

Our faculty and staff have academic training and professional experience in ecology, botany, biology, forestry, geology, biogeochemistry, environmental engineering, natural resources management, and geographic information systems. We provide technical services to industry, government agencies, non-profit organizations, community groups, and private landowners. Working in partnership with public and private stakeholders, we have successfully completed more than 180 environmental projects while simultaneously providing NKU students with over 25,000 contact hours of employment, research, and internship opportunities. For more information, visit the Center's website at http://access.nku.edu/ appliedecology/.

## Goals for the Center are:

- Prepare teachers for science and mathematics by offering integrative science and mathematics coursework for prospective teachers at all levels and by developing programs of outreach and continuing education for current teachers.
- Prepare students who are capable of handing complex interdisciplinary problems by working with faculty and departments to develop interdisciplinary science and mathematics coursework, by enabling students to collaborate with faculty on research projects, and by facilitating externship opportunities for students with local business and industry.
- Equip the general citizenry to understand science and mathematics by offering opportunities for students at our schools to interact with faculty and students at NKU and by developing learning opportunities that are accessible to the wider community.

For additional information, visit CINSAM's website at http://cinsam.nku.edu.

## Institute for Freedom Studies

## Eric Jackson, director

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jacksoner@nku.edu
859-572-6146
Since its creation in 1999 by a group of NKU faculty and staff members, the Institute for Freedom Studies (IFS) has grown rapidly. The main office is located in Founders Hall 330. The main purpose of the Institute is to promote interdisciplinary research, teaching, and community outreach, grounded in the scholarly study of American cultural history with a specific focus on the legacy of the enslavement experience and the Underground Railroad (UGRR). Institute faculty offer Underground Railroad related courses each semester which explore and critique the
themes of freedom, slavery, and resistance. Students gain valuable research experiences across a range of disciplines that enhance employment opportunities upon graduation. The goals of the Institute are as follows:

1. Partner with and help to empower grassroots community groups to conduct heritage preservation and local history studies.
2. Support interdisciplinary academic research on the Underground Railroad.
3. Develop curricula and faculty opportunities to teach about the Underground Railroad.
4. Work in partnership with the National Underground Railroad Freedom Center to conduct public education, teaching, and research on the Underground Railroad.
For additional information regarding course offerings, internship opportunities, and community outreach initiatives, please contact Dr. Eric R. Jackson, at 859-572-5818 or jacksoner@nku.edu or visit the Institute's website at www.nku.edu/~freedom.

## HONORS PROGRAM

## HONORS PROGRAM

Tom Zaniello, literature and language, Director tzaniello@nku.edu

The NKU Honors Program provides qualified students with a 21hour minor, which includes 15 semester hours of seminars, each having a maximum enrollment of 15 students, plus 6 semester hours for completing the Honors Thesis. At the core of the Honors experience, the seminars emphasize discussion and discovery of ideas. NKU's Honors Program is university-wide. The program showcases open-ended seminars not conforming to the boundaries traditionally dividing fields of expertise. Honors learning affords the intellectual challenges of interdisciplinary education. Administrative support for the Honors Program is provided through the Office of the Provost.

## Qualifying for Honors

NKU's Honors Program is open to first-time freshmen, already enrolled students, and transfer students. To qualify for admission, students should demonstrate curiosity about a wide range of subjects, show that they can take the initiative for their own learning, and prove that they are academically well prepared. Outstanding academic credentials, such as an ACT composite score of 26 or above, or SAT combined scored of 1180, success in advanced-placement courses, strong high school GPA and class rank, or comparable evidence of achievement such as a major scholarship, help to ensure admission. Education and business majors will be considered for the Honors Teaching Fellowship and the International Business Honors Fellowship programs, which has an international focus. Students from all majors should complete an application form (available from Northern Kentucky University, NKU Honors Program, Honors House, Nunn Drive, Highland Heights, KY 41099; phone 859-572-5400), or on the NKU website. Following a review of the application by the program director, applicants receive notification of their standing. Students in good standing in Honors maintain a minimal GPA of 3.25.

## Honors Seminars

The Honors seminars (each worth 3 semester hours) are uniquely adapted to Honors participants' interests, talents, and creativity. The seminar sequence begins with Introduction to Honors (HNR 101). Next, stu-
dents take any four of the following nine seminars: Humanity and Nature (HNR 301), Humanity and Society (HNR 302), Humanity and the Imagination (HNR 303), Humanity and the Machine (HNR 304), Studies in Diversity (HNR 306), Studies in Film (HNR 307), The World in Transition (HNR 308), World Cities/World Cultures (HNR 309,) and Special Topics (HNR 394). Students may substitute up to two disciplinary honors courses (such as ENG 151) for HNR courses. Faculty members who are devoted to excellence in teaching and proven meritorious in their respective fields teach in NKU's Honors Program. Finally, students complete an Honors Thesis/Project (HNR 491 or independent study in a student's major), which gives them the chance to read and discuss topics of lasting significance, conduct independent research, and present oral reports of their conclusions. The Thesis/Project has proven to be of value in successful applications for graduate or professional study beyond the undergraduate degree.

## Co-curricular Activities

Honors participants may take advantage of a broad range of co-curricular activities. Locally, they may elect to become members of the Honors Student Association, which sponsors group experience in the arts, engaging in dialogue with guests invited to speak especially with the club, film nights and coffee house events, and community service. Becoming an officer in the club helps to build leadership capabilities.

NKU is a full member of the National Collegiate Honors Council (NCHC), at whose annual meetings Honors students present papers of original research or study. Other international study opportunities are open to Honors students, who are eligible for Honors travel fellowships.

## Recognition and Privileges

NKU takes great pride in its Honors students and rewards them accordingly. Recognition and international scholarships are available. Students who successfully complete the Honors curriculum are designed "University Honors Scholars," a term that appears on their diplomas and transcripts. The Honors coursework may be claimed as a minor, but the effect of Honors learning is major in broadening the students' educational background.

## THE COLLEGE OF BUSINESS

## DEPARTMENTS

Accountancy, Construction Management, Economics and Finance, Management, and Marketing

## CONTACTING THE COLLEGE OF BUSINESS

The College of Business is located in BEP 401 and may be reached during business hours by phone at 859-572-5165. Interested persons are invited to browse the college's website at http://cob.nku.edu/.

Dr. John M. Beehler, Dean<br>Dr. Margaret Myers, Associate Dean

beehlerj1@nku.edu myersm@nku.edu

Inquiries about College of Business undergraduate programs and advising questions are directed to the College of Business Advising Center. The College of Business Advising Center is located in BEP 301, 859-572-6134, http://cob.nku.edu/COBAdvisingCenter.

## PROGRAMS OFFERED BY THE COLLEGE OF BUSINESS

Associate of Applied Science
Construction Technology
Pre-Business Studies

## Bachelor of Science

Accounting
Business Administration
Business and Marketing Education
Career and Technical Education
Construction Management
Economics
Entrepreneurship
Finance
Human Resource Management
Management
Marketing
Sports Business

## Minors

Accounting
Business Administration
Construction Management
Economics
Entrepreneurial Studies
Finance
Management
Marketing

## Certificate Programs

Accounting CPA Track
Accounting General
Applied Economics and Public Policy
Architectural Drafting
Entrepreneurship
Finance General
Financial Planning
Marketing Research
Sports Business

## Graduate Programs Master of Accountancy Specialization Tracks

Professional Tax

## Master of Business Administration

Specialization Tracks
Business Administration
Entrepreneurship
Finance
Industrial Psychology/Human Resource Management
Information Systems International Business
Marketing
Project Management

## Master of Science in Executive Leadership and Organizational Change

## Juris Doctor/Master of Business Administration

## VISION, MISSION, AND GOALS OF THE COLLEGE OF BUSINESS

## Our Vision

The College of Business at Northern Kentucky University will be the preferred choice of students, faculty and organizations in our region, known for excellence in practical instruction, applied research, and public engagement.

## Our Mission

Our primary mission is to prepare our students to contribute positively to their organizations and communities. We educate future leaders to perform effectively and ethically in a global environment as professionals in business, public, and social enterprises. Our programs are strengthened by diversity among our students and faculty.

Our faculty and students actively engage in scholarship that is relevant to our academic programs and to the business community. We value all types of rigorous scholarship, with a primary focus on applied and pedagogical intellectual contributions.

We leverage partnerships between students, faculty and the community to continuously improve the educational experience and to enhance the integration of scholarship and public engagement to classroom learning. Our public engagement efforts are designed to enrich our communities.

## Our Values

Learner-Centered

- We place the learner at the center of all our educational experiences
- We discover, interpret, and apply information in order to transmit knowledge to our learners
Civic Engagement
- We establish partnerships between our students, communities, and faculty
- We integrate scholarship and service learning
- We use our partnerships, scholarship and service learning to transform our communities


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Academic Freedom

- We encourage the open expression of ideas
- We are committed to intellectual and creative freedom
- We support innovative approaches to meeting our vision and
mission
Integrity
- We make every effort to do the right thing
- We are committed to being honest in our dealings with our col-
- Weagues and stakeholders
- We align our actions and decisions with NKU's Core Values


## ACCREDITATION

All business degree programs offered in the College of Business are fully accredited by the AACSB International-The Association to Advance Collegiate Schools of Business. AACSB is the internationally recognized accrediting agency for business programs. Only 515 programs within the United States and 46 collegiate business programs in other countries are accredited by AACSB. Accreditation involves standards of excellence in the curriculum, faculty, students, facilities, and overall business programs. Business courses completed by students from NKU are transferable to other accredited programs throughout the world.

The CMGT degree in the Department of Construction Management is accredited by ACCE, the American Council for Construction Education. ACCE is the internationally recognized accrediting agency for construction management programs. Only 60 baccalaureate programs in the United States are accredited by ACCE. Accreditation involves standards of excellence in the curriculum, faculty, students, facilities, industry relationships and overall construction program.

The BED and CTE programs in the Department of Construction Management are accredited by the National Council for Accreditation of Teacher Education. See the College of Education and Human Services section of this catalog for additional information concerning accreditation for teacher education programs.

## DEGREE PROGRAMS

Business degree programs in the College of Business are professional programs designed to prepare graduates for lifelong careers in a variety of business fields. The coursework and related available educational experiences prepare graduates in three ways for the opportunities, challenges, and responsibilities they will encounter in the business world. First, graduates are to assume a place in society as aware, mature people who are comfortable with change and comfortable with enduring values and wisdom by completing a strong and varied general education curriculum. Second, graduates are prepared to understand and appreciate the context within which their work takes place by completing a solid and diverse basic business curriculum. And third, graduates are prepared to enter successfully their chosen fields and to cope effectively with changes that are likely to take place over time by completing a well-planned and intense major curriculum.

The College awards the degree of Bachelor of Science upon successful completion of bachelor's requirements because there is considerable emphasis upon quantitative analysis in the various business courses required. The degree granted for successful completion of an associate program is an Associate of Applied Science.

The College offers twelve bachelor's degree programs, two associate degree programs, and eight minors, described in the following pages. The College of Business also offers the following graduate degrees: Master of Accountancy, Master of Business Administration, the Juris Doctor/Master of Business Administration, and the Master of Science in Executive Leadership and Organizational Change.

## DECLARING A MAJOR IN THE COLLEGE OF BUSINESS

The College of Business has selective admissions for its Bachelor of Science degree programs in business. When students meet these selective admissions criteria, they may certify their major. Selective admission
requirements differ slightly among majors. Please see major requirements, listed elsewhere in this catalog, for specific information.

Students who have not yet been certified for a major (i.e., have not yet met the selective admissions criteria for a major) are encouraged to declare a "pre-major" in the College of Business. Students may declare a pre-major in one of the eight business discipline areas in which bachelor's degrees are offered (accounting, business administration, entrepreneurship, finance, human resource management, management, marketing and sports business). These pre-majors give students the opportunity to be advised and to explore academic options.

Declaring a pre-major does not prevent a change of major after selective admission requirements are met. However, additional course requirements for the new major may need to be completed.

Students who wish to pursue a degree in the College of Business, but are uncertain of a major, are encouraged to declare a pre-major called "Undeclared in the College of Business." This pre-major offers students the opportunity to receive academic advising from the College of Business Advising Center while exploring degree options within the college.

## COLLEGE-WIDE REQUIREMENTS

Students must meet all current course and class-standing prerequisites before enrolling in any College of Business course. This policy applies to non-business students, transient students, non-degree seeking students, and business students. Students who complete prerequisite courses at institutions other than Northern Kentucky University will be required to provide documentation of the courses taken. Students lacking prerequisites in any course will be administratively withdrawn from that course.

Students majoring in a bachelor's program in a business discipline must have completed all selective admission requirements and must have certified a major before enrolling in any 400-level course in the college.

Students majoring in a business discipline must complete at least 64 semester hours in courses outside the College of Business. ECO 200 and ECO 201 count as non-business courses for this requirement. Transfer students must complete at least $50 \%$ of the required business courses and $50 \%$ of the major coursework at Northern Kentucky University.

Additionally, students are required to complete at least 45 semester hours of upper-division (300-400 level) courses for graduation.

Successful completion of BIS 300 as part of the minor in business administration simultaneously fulfills NKU’s computer literacy graduation requirement for students majoring in the College of Business.

## ASSOCIATE DEGREE PROGRAM

## Pre-Business Studies (66 semester hours)

The associate degree program is designed to provide a consistency between it and the preparation students require to pursue any of the business bachelor's degree curricula in the College of Business. Students must fulfill the associate degree general studies component (see elsewhere in this catalog) and complete a minimum of 66 semester hours of coursework outlined below.

## Core Requirements

INF 101 Computer Literacy and Informatics
MAT 109 Algebra for College Students (or ACT math score of 23 or higher)
ACC 200 Principles of Accounting I - Financial
ACC 201 Principles of Accounting II - Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
MGT 205 Business Management Principles
General Education Requirements
CMST 101 Principles of Speech Communication
ENG 101 College Writing
MAT 114 Finite Mathematics

ENG 291 Advanced Writing
One course from humanities/fine arts component
One course from natural sciences component
One course from social or behavioral sciences component

## Electives

Students should select general education courses and electives that fit into the bachelor's degree requirements for business majors. Advising is available in the College of Business to assist students in making these choices.

## MINORS

## The Minor in Business Administration

The minor in business administration is available to students whose major is outside the College of Business. It is required for the following bachelor's degrees in the College of Business: Accountancy, Business Administration, Entrepreneurship, Finance, Human Resource Management, Management, Marketing, and Sports Business.

ACC 200 Principles of Accounting I - Financial
ACC 201 Principles of Accounting II - Managerial
BIS 300 Management Information Systems
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
FIN 305 Principles of Finance
MGT 305 Operations Management in Business
MKT 305 Principles of Marketing
(Note: MAT 109 Algebra for College Students, MAT 114 Finite Mathematics and STA 212 Statistics for Business Applications I are prerequisites for one or more courses in the minor in business administration.)

## Other Minors in the College of Business

Minors in Accounting, Construction Management, Economics, Entrepreneurial Studies, Finance, Industrial Technology, Management, and Marketing are described in respective sections below.

## POST-BACCALAUREATE CERTIFICATES

Students who have completed a bachelor's degree may pursue certificate programs in the College of Business. Certificates are offered in the following subjects: Accounting, Applied Economics and Public Policy, Entrepreneurship, Finance, Financial Planning, Marketing Research and Sports Business. The requirements for these certificates are described in respective sections below.

## AFFILIATIONS

## Fifth Third Bank Entrepreneurship Institute

The mission of the Fifth Third Bank Entrepreneurship Institute is to serve the Kentucky region by maximizing learning opportunities for entrepreneurially inclined students by: providing an entrepreneurship curriculum at the undergraduate and graduate levels; conducting applied research on topics relevant and useful to practicing entrepreneurs; and serving as a comprehensive and valued resource for students, faculty, and the regional business community. Entrepreneurship, creating value through innovation, is one of the fastest growing subjects in today's business schools. A number of factors are driving this interest; however, the primary force is the desire and need to compete creatively in both large and small firms. The focus of the academic programs in the Fifth Third Bank Entrepreneurship Institute is on generating ideas based on creativity, opportunity identification, feasibility studies, start-up activities and early stage strategies; and sound business practices and new initiatives within corporate environments.

The outreach programs of the Entrepreneurship Institute capitalize on the expertise of NKU faculty and staff, the insight and counsel of
nationally known experts, and exciting external market opportunities. These programs are intended to serve the assistance and educational needs of entrepreneurs in a variety of environments: small businesses ( $<\$ 5 \mathrm{M}$ in annual revenues), closely held businesses ( $>\$ 5 \mathrm{M}$ ), not-for-profits, public corporations, intrapreneurial units of Fortune 500 corporations, and future entrepreneurs in the region and in the NKU student body.

## Small Business Development Center

The Small Business Development Center was established to further economic development in the region by fostering the creation and growth of viable small enterprises. The Center provides a wide variety of professional consulting and training services to small business owners and prospective small business owners in the Northern Kentucky and Greater Cincinnati metropolitan area. In a typical year the center staff will provide assistance to several thousand individuals through free, confidential consulting, classroom seminars, and telephone clearinghouse services.

## Marketing Research Partnership Program

The primary objectives of the Marketing Research Partnership Program are to develop co-op/internship programs, give local research companies the opportunity to interact with students via our marketing research courses and the marketing club, and ultimately to match quality students with local research firms for full-time employment.

The Department of Marketing has a rich tradition of emphasizing marketing research in our curriculum having conducted over 150 studies for local businesses in the past 10 years and placing over 60 students in jobs with partnering companies. Current membership in the program includes the following research companies: Convergys; Burke Inc.; MRSI; AC Nielsen BASES; Directions Research; SIRS; AC Nielsen Market Decisions; Cooper Research; Parker Research and EMI Surveys.

## Center for Economic Education

The Center for Economic Education was established to improve the quality and quantity of economic instruction at all grade levels and to promote economic literacy in the community. The Center actively serves the eight-county service area through an extensive schedule of professional development programs for K-12 teachers, graduate credit courses, curriculum consultation with teachers and schools, research activities, and an extensive free-loan library.

## International Business Center

The IBC Mission is to offer state-of-the-art research, teaching, and outreach programs that enhance the NKU community's global knowledge and cross-cultural skills. In line with this mission, the International Business Center is overarching goals are to: enhance knowledge and understanding of international business practices across campus and in the Northern Kentucky regional community by organizing and participating in exchanges, seminars, and conferences on international business topics; develop academic programs to assist students, faculty and business professionals meet the challenges of operating in multiple international environments in keeping with the spirit of the UN Global Compact; serve as a regional resource for international business teaching, research, and professional development; provide a forum for joint business and academic cooperation in an effort to develop responsible global leaders through education, service, internships, and co-ops; and promote efforts to work collaboratively with other NKU offices and programs to meet the education and training needs of professionals engaged in international business activities. The Director works with a distinguished Advisory Board including representatives from P\&G, GE, Wild Flavors, PNC Bank, Frost Brown \& Todd LLC, World Affairs Council of Greater Cincinnati, International Visitors Center, Global Central Labs-PPD, U.S. Department of Commerce (DOC)/US Commercial Service (USCS) of Southern Ohio and Northern Kentucky, and the Northern Kentucky Chamber of Commerce (NKITA).

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## College of Business Advisory Council

The College of Business receives continuing oversight and direction from the Business Advisory Council. The members include: Richard Buddeke, Barge Exchange; Kevin E. Cranley, The Willis Music Company; Bob Gepfert, Arden Technical Training; Tom Green, John R. Green Company, Roger D. Griggs, Union Springs, LLC; Jeffrey Groob, First Mobile Technologies; B. Stephen Harper, Harper Oil Products, Inc.; Marc A. Hoffman, St. Elizabeth Medical Center; Bill G. Kohlhep, Cors and Bassett LLC; Shirley Lapinna Martin, Paycor; Vivian Llampi, Vivian Llambi and Associates, Inc.; Jamey L. Lykins, Toyota Motor North American Inc.; James Monton, retired, the Procter and Gamble Company; Timothy P. Rawe, Fifth Third Bank; Donna L. Robichaud, Cinergy Solutions; William (Bill) M. Schuler, Castellini Company; Kelly Swartz, Citicorp Credit Services, Inc.; Eric R. (Rick) Thiemann, Hunkar Laboratories; and Mike Vogt, Mazak Corporation.

## COLLEGE OF BUSINESS HONORARY ORGANIZATIONS FOR STUDENTS

## Beta Gamma Sigma

Beta Gamma Sigma is the national honorary society that recognizes excellence in academic achievement in schools of business administration. Beta Gamma Sigma was founded in 1907 to encourage and reward scholarship and accomplishment in the field of business studies, to promote advancement of education in the science of business, and to foster principles of honesty and integrity in business practice. Students are initiated into Beta Gamma Sigma once a year. Only schools of business accredited by AACSB International are permitted to establish chapters. Students in the top $7 \%$ of the junior class, the top $10 \%$ of the senior class and the top $20 \%$ of graduating MBAs are invited to join Beta Gamma Sigma.

## Nu Kappa Alpha

Nu Kappa Alpha is the accounting honorary society. It is responsible for the spring semester Accounting Banquet and service activities to the department and the profession. Criteria for membership in the society are a 3.00 GPA in the major and a 3.00 GPA overall.

## PROFESSIONAL ORGANIZATIONS FOR BUSINESS STUDENTS

NKU Chapter of the Institute of Management Accountants (IMA)
Membership in the IMA Accounting Club exposes students to the wide variety of careers available in accounting and provides opportunities to network with practitioners. The club is committed to community service and to providing opportunities for students to develop leadership skills.

## American Marketing Association--NKU Chapter

The NKU Chapter of the AMA is open to all students and all majors. The club helps students understand the wide range of careers available in the field of marketing. Guest speakers and networking are some of the benefits of membership.

## Collegiate Entrepreneur's Organization

The Collegiate Entrepreneurs' Organization (CEO) informs, supports, and inspires college students to be entrepreneurial. This is an ideal student group for individuals sharing an interest in creativity, innovation, and entrepreneurship. The CEO student group provides opportunities to interact with members of the business community through social and academic events.

## Construction Management Association

The Construction Management Association (CMA) is an umbrella student organization at NKU under which several national student organizations are aligned including the Construction Specification’s Institute (CSI), Mechanical Contractors Association of America and the National Association of Home Builders (NAHB). The CMA and associated national student chapters are open to all construction minors.
Economics Club
The mission of the Economics Club is to promote the discipline of economics in terms of its application in real life situations, to create a fuller understanding of economics and its importance in public/private sector market dynamics. Membership is open to students in all majors.

## NKU Finance Student Association

The Finance Student Association promotes a better understanding of finance and provides a means to enrich business students with information regarding career opportunities through a variety of educational trips, guest speakers, and social activities. The mission of the club is to inform, educate, and enhance the classroom learning experience. Membership is open to all students with business and pre-business majors.

## Phi Beta Lambda (PBL)

PBL is a professional business organization for postsecondary students. It provides traditional and nontraditional students the opportunity to enhance their education by participating in various local and national chapter activities such as workshops, conferences, and competitive events.

## NKU Sports Business Club

The Sports Business Club is designed to expose students to the wide range of careers in the sports industry, and supplement students' classroom knowledge with tours and lectures at area sports organizations.

## THE COOPERATIVE EDUCATION PROGRAM

The College of Business and the Cooperative Education Program offer a series of co-op courses providing career-related experience. As part of the co-op program (described elsewhere in this catalog), students may enroll in Cooperative Education Experience (CEP 300). Bachelor's degree students may apply a total of 12 semester hours of CEP 300 toward the 128 -semester-hour requirement for graduation; associate degree students may apply a total of 6 semester hours of CEP 300 toward the minimum 66 semester-hour requirement for graduation. Students majoring in Construction Management or Construction Technology participate in the cooperative education program through the Department of Construction Management and enroll in CMGT 301.

## CONTACTING THE DEPARTMENT

The Department of Accountancy is located in BEP 469 and may be reached during business hours by phone at 859-572-6526. Visit the department's website at http://cob.nku.edu/Accountancy/.

## PROGRAMS OFFERED

Bachelor of Science
Accounting
Minor
Accounting
Master of Accountancy (see Graduate Catalog)

## GENERAL EDUCATION COURSES OFFERED <br> None

## THE BACHELOR'S DEGREE PROGRAM

The program leading to the degree of Bachelor of Science with a major in accounting and a minor in business administration is offered to students who seek careers as accountants and auditors with public accounting firms or with commercial, industrial, or public institutions. The graduate might eventually become an internal auditor, cost accountant, budget director, tax accountant, Internal Revenue agent, municipal finance officer, controller, or chief financial officer.

Besides preparation in managerial, financial, and tax accounting, students are given a broad background in business administration, quantitative analysis, and liberal arts. The required curriculum will provide the courses necessary to enter a graduate program in a business discipline.

The accountancy boards of Kentucky, Ohio, and Indiana require 150 semester hours including a bachelor's degree to sit for the CPA exam. Students should check with the State Board of Accountancy in the state of residency (or employment) for specific requirements. Those students needing additional semester hours of credit should investigate the Master of Accountancy program (information is provided in the graduate catalog). The undergraduate accounting degree program does meet the educational requirements necessary to take other certifying examinations in accounting (e.g., the Certified Management Accountant examination and the Certified Internal Auditor examination).

Students with a bachelor's degree in another field who now wish to pursue a career in accounting should contact the chair of the Department of Accountancy for information about academic and professional options.

## Pre-major and selective admissions requirements

Students desiring to major in accounting must meet selective admissions requirements for the Department of Accountancy. Some of the selective admissions courses may fulfill requirements in several mandatory categories: general studies requirements, requirements for the major in accounting, and requirements for the minor in business administration.

The selective admissions requirements for the major in accounting can be met by completing the following courses and maintaining a minimum grade-point average of 2.50 in these courses:
Selective Admission-Courses
CMST 101 Principles of Speech Communications
ENG 101 College Writing
MAT 114 Finite Mathematics
ACC 200 Principles of Accounting I—Financial
ACC 201 Principles of Accounting II—Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
ENG 291 Advanced Writing
STA 212 Statistics for Business Applications I

## Additional Requirements

In addition to courses listed under the major in accounting, students must provide evidence of computer literacy; this can be accomplished through a competency exam, completion of BIS 300, or documented completion of equivalent coursework. Accounting majors must also meet the requirements listed in the College of Business section entitled "CollegeWide Requirements."

## Transfer Students

Transfer students with a major in accounting are required to complete at least 15 semester hours of ACC courses and at least 30 semester hours of required business courses at NKU. For evaluation of transferred courses to meet this requirement and the requirement for 64 semester hours of non-business courses, transfer students are advised to make an
advising appointment with the College of Business Advising Center, BEP 301, 859-572-6134, as soon as transcripts from previous institutions are available.

## Degree Requirements

In addition to university-wide requirements, students completing a degree of Bachelor of Science with a major in accounting and a minor in business administration must complete the following coursework.

## Major in Accounting

All students majoring in accounting must complete the following (1) four required quantitative courses, (2) four additional business courses, (3) six core courses, (4) one experiential learning class, and (5) one of the two tracks described below. All accounting majors must have a 2.00 cumulative grade-point average in the courses marked with an asterisk in the requirements below.
Required Quantitative Courses
MAT 109 Algebra for College Students or ACT of 23 or higher
MAT 114 Finite Mathematics
MAT 112 Applied Calculus
STA 212 Statistics for Business Applications I
Additional College of Business Courses
BUS 330 Ethics in Managerial Decision-Making
ECO 305 International Context for Business
MGT 300 Behavior in Organizations
MGT 490 Business Policy
Core Accounting Courses
*ACC 202 Accounting Lab
*ACC 300 Intermediate Accounting I
*ACC 301 Intermediate Accounting II
*ACC 310 Accounting Information Systems
*ACC 350 Management Cost Accounting I
*ACC 400 Auditing
Experiential Learning
At least one course from
ACC 396 Accounting Internship
CEP Cooperative Education Experience I

## Accounting Track

Core Accounting Courses:
*ACC 320 Income Tax Planning
Accounting Elective
At least one course from
*ACC 300 Fraud Examination
*ACC 420 Business Tax Planning Institutions
*ACC 430 Accounting for Non-Profit
*ACC 450 Management Cost Accounting II
At least one communication course from
ENG 340 Business Writing
ENG 371 Traditional Grammar
At least one course with a global focus from
ECO 340 International Economics (previously ECO 403)
ECO 344 Comparative Systems (previously ECO 401)
FIN 415 International Finance
MGT 360 Comparative International Management
MKT 360 International Marketing
PSC 320 Politics of Multinational Corporations
PSC 410 Political Economy

## Accounting Information Systems Track

Core Information Systems Courses:
INF 110 Business Programming

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INF 282 Introduction to Databases
BIS 310 Structured Analysis and Design
BIS 380 Quantitative Analysis with Excel
Accounting majors who desire to earn additional accounting credit hours may choose to take electives from:
*ACC 420 Business Tax Planning Institutions
*ACC 430 Accounting for Non-Profit
*ACC 450 Management Cost Accounting II
The B.S. in Accounting also requires completion of the minor in Business Administration. This minor includes courses previously listed under Selective Admission-Courses and the following four courses:
FIN 305 Principles of Finance
BIS 300 Management Information Systems
MGT 305 Operations Management
MKT 305 Principles of Marketing

## Minor in Accounting

The required courses provide a general introduction to accounting in organizations. Elective courses allow students to pursue their own particular interests in the discipline. Courses that are counted in partial fulfillment of the business administration major may not be counted as fulfilling part of the accounting minor.
Required courses:
ACC 200 Principles of Accounting I - Financial
ACC 201 Principles of Accounting II - Managerial
ACC 202 Accounting Lab
ACC 300 Intermediate Accounting I
Elective courses (any four):
ACC 301 Intermediate Accounting II
ACC 310 Accounting Information Systems
ACC 320 Income Tax Planning
ACC 330 Fraud Examination
ACC 350 Management Cost Accounting I
ACC 400 Auditing
ACC 420 Business Tax Planning Institutions
ACC 430 Accounting for Non-Profit
ACC 450 Management Cost Accounting II

## Additional Requirements

In addition to courses listed under the minor in accounting, students must provide evidence of computer literacy; this can be accomplished through a competency exam, completion of INF 105, or documented completion of equivalent coursework. Students may have to take additional courses to meet prerequisites of selected courses.

## POST-BACCALAUREATE CERTIFICATES

Students who have completed a bachelor's degree may pursue business certificate programs in the College of Business.

## Accounting - CPA Track

The Certificate in Accounting - CPA Track is designed for those students who are interested in work as a Certified Public Accountant (CPA). The State Boards of Accountancy in Kentucky, Ohio, and Indiana require a total of 150 semester hours to apply to take the CPA exam. While many students earn a Master of Accountancy degree to satisfy this requirement, a Master's degree may not be appropriate for everyone. This set of courses is designed to provide students with the total hours, accounting hours, and accounting knowledge necessary to become a CPA. Students enrolled in this certificate program must meet all course pre-requisites except class standing and certification.

## Required Courses

ACC 300 Intermediate Accounting I
ACC 301 Intermediate Accounting II
ACC 310 Accounting Information Systems
ACC 320 Income Tax Planning
ACC 350 Management Cost Accounting I
ACC 400 Auditing
Pre-requisite Courses
INF 101 Computer Literacy and Informatics
ACC 200 Principles of Accounting I - Financial
ACC 201 Principles of Accounting II - Managerial
MAT 112 Applied Calculus
STA 212 Statistics for Business Application I
ENG 340 or OST 311 or SPE 303

## General Accounting

The Certificate in General Accounting is designed for those students who are interested in work as an accountant in a field other than public accounting. Such fields would include work as an accountant in a corporation, a governmental agency, or a non-profit agency. This set of courses is designed to provide students with accounting knowledge necessary to become an accountant. Students enrolled in this certificate program must meet all course pre-requisites except class standing and certification.

## Required Courses

ACC 300 Intermediate Accounting I
ACC 301 Intermediate Accounting II
AC 310 Accounting Information Systems
ACC 320 Income Tax Planning
ACC 350 Management Cost Accounting I
One other upper-division ACC course
Pre-requisite Courses
INF 101 Computer Literacy and Informatics
ACC 200 Principles of Accounting I - Financial
ACC 201 Principles of Accounting II - Managerial
MAT 112 Applied Calculus
STA 212 Statistics for Business Application I
ENG 340 or OST 311 or SPE 303

## Construction Management Department

## FACULTY

Sean P. Foley, chair
Paul D. Cooper, Ausbra McFarland, Daryl Orth, Christine B. Stiegler, Lewis Edward Workman

## CONTACTING THE DEPARTMENT

The Department of Construction Management is located in BP 475 and may be reached during business hours by phone at 859-572-5440, by e-mail at cmgt@nku.edu, or by visiting the department's website at http:// cob.nku.edu/cmgt.

Sean P. Foley, chair foleys@nku.edu

## PROGRAMS OFFERED BY THE DEPARTMENT <br> Associate Degree Programs <br> Construction Technology (CST)

## Bachelor's Degree Programs

Business and Marketing Education (BED)
Career and Technical Education (CTE)
Construction Management (CMGT)

## Minors

Construction Management
Industrial Education

## Certificate

Architectural Drafting

## ACCREDITATION

American Council for Construction Education (ACCE), CMGT Program

National Council for Accreditation of Teacher Education, (NCATE), BED and CTE

## PRE-MAJORS AND SELECTIVE ADMISSION REQUIREMENTS

See College of Education and Human Services admission requirements for BED program.

## MISSION STATEMENT

The mission of the Department of Construction Management at Northern Kentucky University is to offer comprehensive educational opportunities for students in construction management, business career and technical education and surveying. We will meet this mission by:

- providing continuous outreach opportunities to engage our learners
- providing training and professional development for leading social, economic, and workforce organizations in Kentucky, Ohio, and Indiana region and the global arena; and
- collaborating with our community to lead the advancement of emerging technologies in an effort to promote economic growth.
We will achieve our mission through a performance standard of excellence in teaching, community service and research. We will use continuous feedback and assessment to evaluate the currency of our mission.


## BACHELOR'S DEGREE PROGRAMS

## BUSINESS EDUCATION (BED)

The Department of Construction Management offers two options in business and career education: (1) Business/Marketing Education (BED) and (2) Career and Technical Education (CTE).

## Major in Business/Marketing Education

This bachelor's degree program prepares students to teach business subjects in high school and middle grades. It provides the courses and guidance to enable students to meet Kentucky Department of Education teaching certification requirements.

Students pursuing a business teacher education/secondary education program should review that portion of the NKU Catalog relating to education. Upon deciding to pursue the program, students must schedule an appointment with the coordinator of certification and advisement in the College of Education.

Northern Kentucky University is an approved institutional member of the National Association of Business Teacher Education. Northern Kentucky University is accredited by the National Council for the Accreditation of Teacher Education and by the Southern Association of Colleges and Schools.

## A. General Education/Electives (46-51 semester hours)

Fulfilled by the required/distributive components set forth by the University and the College of Education and Human Services.

## B. Technical Core (21 semester hours)

INF 101 Computer Literacy and Informatics
INF 110 Business Programming
INF 186 Elementary Web Design
CTE 316 Intercultural Business Communications
CTE 383 Advanced technical Study
ENG 340 Business Writing
CMST 440 Communication Training and Development
C. Professional Core ( 21 semester hours)

ACC 200 Principles of Accounting I—Financial
ACC 201 Principles of Accounting II—Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics (or ECO 201)
ECO 215 Contemporary Economic Issues
MGT 205 Introduction to Business and Management
MKT 305 Principles of Marketing
D. Education Core ( 37 semester hours)

Course requirements for the Education Core are listed in the College of Education and Human Services program requirements for Secondary Education.
Total Program Hours
Total hours include 6 hours for ECO 200 and ECO 215 which also count in the general education program.

## Major in Career and Technical Education (CTE)

The Career and Technical Education program is designed for three general groups of students: (1) in-service vocational-industrial teachers, (2) individuals preparing for careers in corporate industrial/technical training, personnel development, or special industrial re-training programs, and (3) those seeking general training careers in business and industry. This program is not intended for individuals seeking provisional teacher certification in vocational-industrial education or technology education.

Students majoring in this program are required to demonstrate computer proficiency prior to graduation.

## A.General Education Program Requirements (46 semester hours)

## B. Professional Core (31 semester hours)

CTE 180 Foundations of Career/Technical Education
CTE 181 Instructional Systems Development
CTE 280 Instructional Methods Career/Technical Education
CTE 281 Evaluation in Career/Technical Education
CTE 380 Organizational and Management of Career/Technical Education
CTE 382 Exceptional Students in Career/Technical Education
CTE 487 Seminar in Teaching Career/Technical Education
CTE 488 Problems in Career/Technical Education
CTE 494 Seminar in Career/Technical Education
EDU 300 Personality Psychology
C. Technical Component (51 semester hours)

Approved Lower/Upper Division Electives (30 semester hours)
Approved Upper Division Electives (21 semester hours)
Total Program Hours

## CONSTRUCTION MANAGEMENT (CMGT)

This Bachelor of Science program is a balanced curriculum drawn from a variety of disciplines relating to the construction industry. Students gain knowledge and understanding of materials and construction pro-

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cesses, principles of design, and concepts of supervision and human relations. Additional experiences promote development of communication and technical competencies that enable students to excel with technical, managerial, entrepreneurial, and production problems.

Students must fulfill all requirements for the 129-semester-hour degree program including general education, core requirements, technical support, and one of the following: the business and management component or the minor in Entrepreneurial Studies offered by the Department of Management.

## Construction Management

A. Core Requirements ( 52 semester hours)

CMGT 101 Introduction to Construction Management
CMGT 120 Construction Materials
CMGT 121 Construction Processes
CMGT 122 Architectural Drafting and Design
CMGT 220 Plane Surveying
CMGT 222 Architectural CAD
CMGT 301 Cooperative Education
CMGT 303 Construction Specifications
CMGT 305 M/E/P Systems I
CMGT 306 M/E/P Systems II
CMGT 320 Construction Estimating
CMGT 322 Structural Design
CMGT 323 Land Planning and Development
CMGT 324 Construction Scheduling
CMGT 325 Construction Safety
CMGT 415 Construction Management
CMGT 429 Civil Design
B. Capstone Elective (3 semester hours)

CMGT 424 Construction Renovation and Restoration or CMTC 431 Capstone: Commercial and Residential
C. Technical Support (9 semester hours)

CMGT 328 Soil Technology and Foundation Design
CMGT 400 Building Codes
CMGT 426 Heavy Construction
CMGT 427 Construction Law and Legal Contracts
CMGT 430 Design Build
CMGT 494 Seminar in Construction Management
EGT 316 Materials Processing and Fabrication
D. Support Requirements (11 semester hours)

GLY 110 The Face of the Earth with lab
PHY 110 Introduction to Physics with lab
MAT 119 Pre-Calculus Mathematics
E. Choose one of the following required mathematics courses (3 semester hours)

MAT 112 Calculus for Business Applications
MAT 121 Calculus 1A
STA 205 Introduction to Statistical Methods
F. Choose one of the following

Business and Management Component (18 semester hours) or Entrepreneurial minor (18 semester hours). Either option will fulfill the NKU requirement for a secondary area of study.

## Business and Management Component (18 semester hours)

Please note if ECO 200 and/or ECO 201 are chosen, they will fulfill requirements in the major and in general education.

## Required Business Courses:

BUS 230 Legal Environment
Economics course is required, either ECO 200 or ECO 201
Business Electives - Choose 4 courses from the following:

ENTP 150 Overview of Accounting
ECO 200 Macroeconomics
ECO 201 Microeconomics
HRM 300 Introduction to Labor Relations
HRM 302 Contract Administration and Dispute Settlement
lLDR 305 Human Relations in Business and Industry
LDR 308 Leadership in a Quality Environment
LDR 315 Personnel Management
LDR 395 Total Quality Teamwork
MGT 205 Business Management Principles
MKT 305 Principles of Marketing
Entrepreneurial Studies (18) semester hours Administered by the
Department of Management
Required:
ENTP 150 Overview of Accounting
ENTP 300 New Venture Creation
ENTP 333 New Venture Management
ENTP 497 Senior Portfolio: Writing the Business Plan
Elective Courses in Entrepreneurship - Select 2:
ENTP 375 Marketing Strategies for Entrepreneurial Business
ENTP 376 New Venture Financing
ENTP 377 Family Business Management
ENTP 378 Emerging Enterprise Law
ENTP 379 Corporate Entrepreneurship
ENTP 396 Entrepreneurial Internship

## Construction Management - Surveying Track (ZCMS)

The Bachelor of Science in Construction Management - Surveying Track is a partnership degree program between Cincinnati State Technical and Community College (CSTCC) and NKU. Students pursuing this degree must complete the Associate Degree in Civil Engineering Technology - Surveying from CSTCC and the Advanced Surveying Certificate program from CSTCC which requires a five course sequence beyond the associates degree. Students then transfer to NKU and complete the requirements listed below as well as general education and other university wide degree requirements. The Advanced Surveying certificate at CSTCC and the courses at NKU for this degree are offered on-line. Graduates from this bachelors degree program will qualify to sit for the Professional Registration Test in Kentucky, Ohio and Indiana after serving the proper residency under a licensed surveyor. Students interested in pursuing the Indiana Surveyor's License are required to take approximately three additional science courses as outlined by the State of Indiana.

## Core Requirements (9 semester hours)

CMGT 325 Construction Safety
CMGT 301 Cooperative Education
CMGT 431 Capstone-Surveying
Choose one of the following requirements: Business and Management (18 semester hours) or Entrepreneurial Minor (18 semester hours). Either option will fulfill the NKU requirement for a secondary area of study.

## Business and Management Component (18 semester hours)

Please note if ECO 200 and/or ECO 201 are chosen, they will fulfill requirements in the major and in general education.

## Required Course

CMGT 415 Construction Management
Choose 5 courses from the following:
ENTP 150 Overview of Accounting
ECO 200 Macroeconomics
ECO 201 Microeconomics
MGT 205 Introduction to Business and Management
LAS 300 Introduction to Labor Studies
IET 305 Human Relations in Business and Industry
IET 308 Leadership in a Quality Environment

IET 315 Personnel Management
IET 395 Total Quality Teamwork
MKT 305 Principles of Marketing
Entrepreneurship Studies (18 semester hours. Administered by the Department of Management.)
Required:
ENTP 150 Overview of Accounting
ENTP 300 New Venture Creation
ENTP 333 New Venture Management
ENTP 497 Senior Portfolio: Writing the Business Plan
Elective Courses in Entrepreneurship - Select 2:
ENTP 375 Marketing Strategies for Entrepreneurial Business
ENTP 376 New Venture Financing
ENTP 377 Family Business Management
ENTP 378 Emerging Enterprise Law
ENTP 379 Corporate Entrepreneurship
ENTP 396 Entrepreneurial Internship

## ASSOCIATE DEGREE PROGRAM

## Construction Technology (CST)

Due to the growth and expansion of the modern construction industry, employment opportunities are numerous and varied. Graduates of the program will have acquired the abilities to plan, develop, and supervise construction of commercial buildings, residences, and other structures. Construction technicians provide services to engineers, architects, developers, construction materials designers, manufacturers, and distributors.

Support Component (7 semester hours)
GLY 110 The Face of the Earth with Lab or
PHY 110 with Lab
MAT 118 Technical Mathematics or MAT 119
Pre-Calculus Mathematics
Specialization Component (46 semester hours)
CMGT 101 Introduction to Construction Management
CMGT 120 Construction Materials
CMGT 121 Construction Processes
CMGT 122 Architectural Drafting and Design
CMGT 220 Plane Surveying
CMGT 222 Architectural CAD I
CMGT 301 Cooperative Education
CMGT 303 Construction Specifications and Estimating
CMGT 305 M/E/P Systems I
CMGT 306 M/E/P Systems II
CMGT 320 Construction Estimating

CMGT 325 Construction Safety
Three CMGT Technical Elective Courses as approved by an advisor.

## MINORS

## Construction Management (22 semester hours)

The minor in Construction Management offers students the opportunity to gain knowledge and a broad understanding of the construction industry. Two elective courses in the minor allow student to explore an area of individual interest. To complete the minor, students must earn a minimum of 22 semester hours of credit, distributed as follows:

## Required Courses

CMGT 101 Introduction to Construction Management
CMGT 120 Construction Materials
CMGT 121 Construction Processes
CMGT 122 Architectural Drafting and Design
CMGT 222 Architectural CAD I
CMGT 303 Construction Specifications and Estimating
Elective Courses: choose any two courses; another course may be chosen with an advisor's advance consent:

CMGT 220 Plane Surveying
CMGT 305 M/E/P Systems I
CMGT 306 M/E/P Systems II
CMGT 320 Construction Estimating
CMGT 323 Land Planning and Development
CMGT 324 Construction Scheduling
CMGT 325 Construction Safety
CMGT 400 Building Codes
CMGT 427 Construction Law and Legal Contracts

## CERTIFICATE

## Certificate in Architectural Drafting

This program is designed to prepare students for entry-level positions as drafters in the architectural and construction industries. This certificate program offers the opportunity for students to gain skills on the board and CAD, while developing a basic understanding of construction materials and processes. All courses in this certificate program may be transferred into the Construction Technology (CST) Associate Degree Program. This certificate program requires 21 semester hours.

CMGT 120 Construction Materials
CMGT 121 Construction Processes
CMGT 122 Architectural Drafting and Design
CMGT 222 Architectural CAD (Auto CAD)
CMGT 301 Cooperative Education
CMGT approved electives

## Economics and Finance Department

## FACULTY

Gary Clayton, chair
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## CONTACTING THE DEPARTMENT

The Department of Economics and Finance is located in BEP 425 and may be reached during business hours by phone at 859-572-6581. You are also encouraged to visit the department's website at http:// cob.nku.edu/Economics\&Finance/

## PROGRAMS OFFERED

Bachelor of Science
Economics
Finance
Minors
Economics
Finance

## Certificates

Applied Economics and Public Policy
Financial Planning
Finance

## GENERAL EDUCATION COURSES OFFERED

ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics

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## THE BACHELOR DEGREE PROGRAM - ECONOMICS

The major in economics is a professional degree for non-business majors who want to prepare for graduate school or desire career opportunities in international trade, applied economics, or the social sciences. These careers include work as private and public sector economists, as well as employment in other jobs that involve the study and forecasting of economic conditions and trends. Successful organizations require personnel with the skills to gather and analyze information about the economic environment which can be used to develop business or public policy. A degree in economics is excellent preparation for any career that requires knowledge of decision-making methods and the ability to analyze data relevant to making those decisions. The degree in economics is also sufficiently flexible to appeal to those students who desire a double major.

## The Major in Economics

Students majoring in economics are required to complete general education requirements of the university. Students must also complete the seven required courses listed below plus four courses in one of the three tracks. Students who do not wish to complete a track have the option of completing four additional upper-division economics courses of their choice.

## Required Core Courses:

ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
STA 205 Introduction to Statistical Methods, or
STA 212 Statistics for Business Applications I
CEP 300 Cooperative Education Experience
ECO 300 Intermediate Macroeconomics
ECO 301 Intermediate Microeconomics
ECO 494 Seminar in Economics

## Additional requirements for the B.S. in Economics:

Any four upper-division ECO courses or choose one of the following tracks:

International Track:
Three of the following courses:
ECO 305 The International Context for Business
ECO 340 International Economics
ECO 342 Economic Development
ECO 394 Topics in Economics
One of the following courses:
GEO 310 Geography of Population
SPE 355 Cross-cultural Communication
PSC 410 Political Economy
PSC 481 International Organizations

## Applied Track:

MAT 112 Applied Calculus
Three of the following courses:
ECO 310 Introduction to Econometrics
ECO 330 Regional Economics
ECO 332 Public Finance
ECO 350 Labor Economics
ECO 394 Topics in Economics

## Social Science Track:

Any two upper-division ECO courses and two courses from the following:

GEO 301 Urban Geography
GEO 303 Cultural Geography
GEO 309 Historical Geography of the United States
GEO 360 Historical Urban Geography
HIS 419 Social and Economic History of the United States
LAS 300 Introduction to Labor Relations

LAS 304 Wages and Benefits
PSC 328 State and Urban Problems
PSC 410 Political Economy or any two other approved courses
Economics majors who may want to get an MBA in the future are encouraged to complete seven additional courses in the College of Business (ACC 200, ACC 201, BUS 230, FIN 305, BIS 300, MGT 305, MKT 305, and associated prerequisite courses). These courses, along with ECO 200 and ECO 201, complete the requirements for the Minor in Business Administration.

## The Minor in Economics

Both of the following courses are required plus any other six ECO classes for a total of 24 semester hours:

ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics

## POST-BACCALAUREATE CERTIFICATE

Students who have completed a bachelor's degree may pursue certificate programs in the College of Business.

## Applied Economics and Public Policy

The Certificate in Applied Economics and Public Policy is designed for students interested in acquiring the knowledge and skills that will enhance their effectiveness in the area of applied economics and public policy. This set of courses provides students with the opportunity to develop critical thinking and problem solving skills and apply them to current economic issues.

## Required Courses

ECO 301 Intermediate Microeconomics
ECO 332 Public Finance
ECO 342 Economic Development
ECO 394 Topics in Economics
ECO 494 Seminar in Economics
PSC 214 Government and Business
Pre-requisite Courses
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics

## BACHELOR'S DEGREE PROGRAM - FINANCE

The major in finance offers a rich variety of career possibilities for graduates. The field includes jobs in corporate finance, securities, commercial banking, and financial planning. Careers in corporate finance may be in the treasurer's office or the office that manages financial assets, capital budgeting, project financing, mergers and acquisitions, financial risk management, and international finance. Careers in the securities industry include stock brokering, trading, securities analysis and research, and options and futures trading. Banking careers may involve positions as a commercial loan officer, trust administrator, financial risk manager, bank manager, or in the credit lending or bank operations departments. Careers in the financial planning area include the certified financial planner whose responsibilities encompass all aspects of individual financial planning such as retirement, estate, 401 K , college savings, insurance and pension planning, and corporate financial planner advising employees on 401 K , pensions, employee benefits, stock options, and insurance. The Managerial Finance track, with its significant accounting component, prepares students for careers in industries such as manufacturing, engineering and logistics.

In addition to the pre-major and selective admissions requirements specified below, all finance majors are required to complete 15 hours of "core" finance classes and a specialized track consisting of 18-19 hours additional hours for a total of 33-34 hours, depending on the track. The
three tracks include: (1) Corporate Finance and Investments, (2) Financial Services, and (3) Managerial Finance.

The Financial Services track is offered in partnership with Fidelity Investments to meet the needs of the financial services industry. This track, along with all associate pre-requisites, is registered with the Certified Planner Board of Standards, Inc. Courses required to complete the Certificate in Financial Planning and to sit for the CFP ${ }^{\circledR}$ certification examination in both the financial services track and the finance major. ${ }^{1}$

Students are strongly advised to include a cooperative education experience in the academic program. Students have the opportunity to apply for co-op positions at Fidelity Investments through its partnership agreement with the finance program at Northern Kentucky University.

Finally, the finance program is registered with the Treasury Management Association for their Certified Cash Manager (CCM) Associate Program.

## Pre-major and Selective Admissions Requirements

Students desiring to major in finance must meet selective admissions requirements for the Department of Finance. Some of the selective admissions courses may fulfill requirements in several mandatory categories: general studies requirements, requirements for the major in finance and requirements for the minor in business administration. The selective admissions requirements for the major in finance can be met by completing the following courses and maintaining a minimum grade-point average of 2.50 .

```
Selective Admission-Courses
    CMST 101 Principles of Speech Communications
    ENG 101 College Writing
    MAT 114 Finite Mathematics
    ACC 200 Principles of Accounting I—Financial
    ACC 201 Principles of Accounting II—Managerial
    BUS 230 Legal Environment
    ECO 200 Principles of Macroeconomics
    ECO 201 Principles of Microeconomics
    ENG 291 Advanced Writing
    STA 212 Statistics for Business Applications I
```


## Additional Requirements

Finance majors must also meet the "College-Wide Requirements" listed in the College of Business section above as well as all of the requirements for the minor in Business Administration. This 27-hour minor includes the five ACC, BUS and ECO classes required for selective admission, FIN 305 which is required for all finance majors, and the following three courses:

BIS 300 Management Information Systems
MGT 305 Operations Management
MKT 305 Principles of Marketing

## Transfer Students

Transfer students must complete at least $50 \%$ of the courses required for the major and at least $50 \%$ of the major discipline courses at Northern Kentucky University. For evaluation of transferred courses to meet this requirement and the requirement for 64 semester hours of non-business courses, transfer students are advised to make an advising appointment

1. NKU does not certify an individual to use the CFP ${ }^{\circledR}$, CERTIFIED FINANCIAL PLANNER ${ }^{\text {TM }}$, and CFP (with flame logo ${ }^{\circledR}$ ) certification marks. CFP certification is granted only by Certified Financial Planner Board of Standards, Inc. to those persons who, in addition to completing an educational requirement such as this CFP Board Registered Program, have met its ethics, experience and examination requirements. Certified Financial Planner Board Standards, Inc. owns the marks CFP ${ }^{\circledR}$, CERTIFIED FINANCIAL PLANNER ${ }^{\text {TM }}$, and CFP (with flame logo ${ }^{\circledR}$ ) which it awards to individuals who successfully complete initial and ongoing certification requirements.
with the College of Business Advising Center, BEP 301, 859-572-6134 as soon as transcripts from previous institutions are available.

## THE MAJOR IN FINANCE

All students majoring in finance must complete the following (1) four required quantitative courses, (2) four additional business courses, (3) five core finance courses, as well as (4) all of the courses in one of the three tracks below:

## Required Quantitative Courses:

MAT 109 Algebra for College Student or ACT >= 23
MAT 114 Finite Mathematics
STA 212 Statistics for Business Applications I
STA 213 Statistics for Business Applications II
Additional College of Business Courses
BUS 330 Ethics in Managerial Decision-Making
ECO 305 International Context for Business
MGT 300 Behavior in Organizations: Understanding Organizational Life
MGT 490 Business Policy
Core Finance Courses:
FIN 305 Principles of Finance
FIN 310 Financial Planning and Practice
FIN 315 Financial Management
FIN 345 Investments and Security Analysis
FIN 435 Case Studies in Corporate Finance

## Choose one of the following tracks:

Corporate Finance and Investments Track
Choose six from the following eight courses for a total of 18 semester hours:

FIN 325 Capital Budgeting
FIN 335 Working Capital Management
FIN 355 Principles of Risk Management and Insurance
FIN 365 Financial Markets and Institutions
FIN 375 Commercial Bank Management
FIN 405 Derivative Securities
FIN 415 International Finance
FIN 450 Advanced Investments and Security Analysis

## Financial Services Track

All four of the following are required plus any two other upper-division FIN classes for a total of 18 semester hours:

ACC 320 Tax Planning
FIN 355 Principles of Risk Management and Insurance
FIN 385 Financial Planning Process and Estate Planning
FIN 445 Retirement Planning and Employee Benefits

## Managerial Finance Track

This track is offered in conjunction with the Department of Accountancy to give students a solid background in corporate finance and accounting. All seven of the following are required for a total of 19 semester hours:

> ACC 202 Accounting Lab (1-hour course)
> ACC 300 Intermediate Accounting I
> ACC 301 Intermediate Accounting II
> ACC 320 Tax Planning
> ACC 350 Management Cost Accounting I
> FIN 325 Capital Budgeting
> FIN 335 Working Capital Management

## The Minor in Finance

The three following courses plus any other three upper-division FIN classes for a total of 18 semester hours:

FIN 305 Principles of Finance

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FIN 310 Financial Planning and Practice
FIN 345 Investments and Security Analysis
Courses that are counted in partial fulfillment of the major in Business Administration may not be counted as fulfilling part of the Finance minor.

## POST-BACCALAUREATE CERTIFICATES

Students who have completed a bachelor's degree may pursue business certificate programs in the College of Business

## Finance

The Certificate in Finance is an 18-semester-hour program designed for post-baccalaureates who are interested in corporate finance. The courses are designed to provide students with an understanding of corporate finance, investments, and institutions. Students enrolled in this certificate program must meet all course pre-requisites except class standing and certification. Students with a business degree who are seeking this certificate may have already completed some of the requirements below, in which case they will be waived:
Required Courses
FIN 305 Principles of Finance
FIN 310 Financial Planning and Practice
FIN 315 Financial Management
FIN 345 Investments and Security Analysis
FIN 365 Financial Markets and Institutions
FIN 415 International Finance
Pre-requisite Courses
ACC 200 Principles of Accounting I - Financial
ACC 201 Principles of Accounting II - Managerial
STA 212 Statistics for Business Application I

## Financial Planning

The Certificate in Financial Planning is designed to provide a strong educational basis for individuals pursuing careers in the financial services industry. While NKU does not certify individuals to use the CFP ${ }^{\circledR}$ CER-

TIFIED FINANCIAL PLANNER ${ }^{\text {TM, }}$, and CFP (with flame logo ${ }^{\circledR}$ ) certification marks, students who earn this certificate will have completed the educational requirements required to sit for the CFP exam.

The Certificate in Financial Planning along with all associated prerequisites, is registered with Certified Financial Planner Board of Standards, Inc. CFP certification is granted only by Certified Financial Planner Board of Standards, Inc. to those persons who, in addition to completing an educational requirement such as this CFP Board-Registered Program, have met its ethics, experience and examination requirements. CFP Board Standards, Inc. owns the marks CFP ${ }^{\circledR}$ CERTIFIED FINANCIAL PLANNER ${ }^{\text {TM }}$, AND CFP (with flame logo ${ }^{\circledR}$ ), which it awards to individuals who successfully complete initial and ongoing certification requirements.

Students enrolled in this certificate program must meet all course pre-requisites except class standing and certification. Students with a business degree who are seeking this certificate may have already completed some of the requirements below, in which case they will be waived.

## Prerequisite Courses

ACC 200 Principles of Accounting I - Financial
ACC 201 Principles of Accounting II - Managerial

## Required Courses

ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
STA 212 Statistics for Business Applications I
ACC 320 Tax Planning
FIN 305 Principles of Finance
FIN 310 Financial Planning and Practice
FIN 345 Investments and Security Analysis
FIN 355 Principles of Risk Management and Insurance
FIN 385 Financial Planning Process and Estate Planning
FIN 445 Retirement Planning and Employee Benefits

## Certificate

Entrepreneurship

## GENERAL EDUCATION COURSES OFFERED None

## BACHELOR'S DEGREE PROGRAMS

## Pre-major and selective admissions requirements

Students seeking majors in the Department of Management must meet selective admissions requirements. Some of the selective admissions courses may fulfill requirements in several mandatory categories: general education requirements, requirements for the major in business administration and requirements for the minor in business administration.

The selective admission requirements for the majors are listed separately. Certification of a major requires completion of the specified courses while maintaining a minimum grade-point average of 2.50 in those courses.

## Additional Requirements

Majors must also meet the requirements listed in the College of Business section above entitled "College-Wide Requirements."

## Transfer Students

Transfer students must complete at least $50 \%$ of the courses required for the major and at least $50 \%$ of the major discipline courses at Northern Kentucky University. For evaluation of transferred courses to meet this requirement and the requirement for 64 semester hours of non-business courses, transfer students are advised to make an advising appointment
with the College of Business Advising Center, BEP 301, 859-572-6134 as soon as transcripts from previous institutions are available.

## The Major in Business Administration

The major in business administration is designed to permit students to create a program of interdisciplinary study from upper-division courses in the College of Business appropriate to their academic interests and career goals.

The selective admission requirements for the major in business administration can be met by completing the following courses with a minimum grade-point average of 2.50 in these ten courses:

## Selective Admission-Courses

CMST 101 Principles of Speech Communications
ENG 101 College Writing
MAT 114 Finite Mathematics
ACC 200 Principles of Accounting I—Financial
ACC 201 Principles of Accounting II—Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
ENG 291 Advanced Writing
STA 212 Statistics for Business Applications I
In addition to university-wide requirements, students completing a degree of Bachelor of Science with a major in business administration and a minor in business administration must complete the following coursework.
Additional requirements for the B.S. in Business Administration
One of the following;
FIN 205 Personal Finance
MGT 205 Introduction to Business Management
One of the following:
MAT 112 Applied Calculus
STA 213 Statistics for Business Applications II
All of the following:
MAT 109 Algebra for College Students or ACT >=23
BUS 330 Ethics in Managerial Decision-Making
ECO 305 International Context for Business
MGT 300 Behavior in Organizations
MGT 490 Business Policy
21 hours of upper-division electives from AACSB accredited business programs.

The B.S. in Business Administration also requires completion of the minor in Business Administration. This minor includes courses previously listed under Selective Admission-Courses and the following four courses:

FIN 305 Principles of Finance
BIS 300 Management Information Systems
MGT 305 Operations Management
MKT 305 Principles of Marketing

## The Major in Entrepreneurship

The major in Entrepreneurship prepares students for the challenges of today's fast paced and uncertain economic environment where competition is based on opportunity recognition, innovation, speed to market and entrepreneurial drive. In this innovative degree program, the focus is on developing an entrepreneurial mindset and creating value in the marketplace. Students learn to capitalize on uncertainty rather than avoid it and embrace the learning that comes from taking calculated risks. The curriculum is multidisciplinary and designed to give students an opportunity to develop their own creative skills while applying basic business principles to the challenges of starting a new business, growing a business, or managing a family business. The program emphasizes the new venture creation model and its application in small or large companies and in profit and not-for-profit organizations. Course topics include idea generation, opportunity recognition, feasibility analysis, business plan devel-
opment, venture financing, early stage strategies, corporate venturing, and management of innovation. Through this program students have the chance to meet and interact with entrepreneurial leaders in the region and throughout the world.

The Entrepreneurship major prepares its graduates for a wide range of business-related career paths. Some are prepared to start their own business, either soon after graduation or at some point in the future. Some are prepared to begin a more traditional leadership path where the selfreliance, initiative, creativity, and communications skills developed in this program are viewed as positive qualities by prospective employers. Still others are prepared to apply their newly developed business planning and analysis skills to obtain entry-level positions with consulting firms, commercial lending institutions, and private equity firms. The major in Entrepreneurship provides students with career options not available to students graduating with traditional business degrees.

The selective admission requirements for the major in entrepreneurship can be met by completing the following courses with a minimum grade-point average of 2.50 in these ten courses:

Selective Admission-Courses
CMST 101 Principles of Speech Communications
ENG 101 College Writing
MAT 114 Finite Mathematics
ACC 200 Principles of Accounting I—Financial
ACC 201 Principles of Accounting II—Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
ENG 291 Advanced Writing
STA 212 Statistics for Business Applications I
In addition to university-wide requirements, students completing a degree of Bachelor of Science with a major in entrepreneurship and a minor in business administration must complete the following coursework.
Additional requirements for the B.S. in Entrepreneurship:
MAT 109 Algebra for College Students or ACT>=23
MGT 205 Business Management Principles
STA 213 Statistics for Business Applications II
BUS 330 Ethics in Managerial Decision-Making
CMST 303 Organizational Communications
ECO 305 International Context for Business
ENTP 300 New Venture Creation
ENTP 333 New Venture Management
ENTP 376 New Venture Financing
ENTP 378 Emerging Enterprise Law
MGT 300 Behavior in Organizations
MKT 310 Professional Selling
ENTP 497 Writing the Business Plan
MGT 490 Business Policy
Nine semester hours of elective coursework are required. Electives are to be selected from the list below.

ENTP 375 Marketing Strategies for Entrepreneurial Businesses
ENTP 377 Family Business Management
ENTP 379 Corporate Entrepreneurship
ENTP 396 Entrepreneurial Internship
SPB 305 Sports Marketing
SPB 308 Sports Promotion Tools
SPB 309 Sports Public Relations
MGT 360 Comparative International Management
ECO 340 International Economics
MKT 360 International Marketing
MKT 307 Retail Management
MKT 308 Advertising and Promotion
MKT 320 Consumer Behavior

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MKT 340 Industrial Marketing
FIN 315 Financial Management
FIN 345 Investment and Security Analysis
FIN 365 Financial Markets and Institutions
The B.S. in Entrepreneurship also requires completion of the minor in Business Administration. This minor includes courses previously listed and the following four courses:

FIN 305 Principles of Finance
BIS 300 Management Information Systems
MGT 305 Operations Management
MKT 305 Principles of Marketing

## The Major in Human Resource Management

The B.S. in Human Resource Management is designed to prepare human resource professionals to deal with the challenges of managing today's workforce in a small growing business, corporate or non-profit entity or multinational organization. The program content is designed to provide a comprehensive coverage of the major functional areas of human resource management such as staffing, employee training and development, and wages and benefits. In addition, students will understand and develop personal competencies such as business communications and managing diversity. Finally, students will have the opportunity to gain practical experience in human resource management by completion of rigorous and required internship program.

The selective admission requirements for the major in Human Resource Management can be met by completing the following courses with a minimum grade-point average of 2.50 in these ten courses:

## Selective Admission-Courses

CMST 101 Principles of Speech Communications
ENG 101 College Writing
MAT 114 Finite Mathematics
ACC 200 Principles of Accounting I-Financial
ACC 201 Principles of Accounting II—Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
ENG 291 Advanced Writing
STA 212 Statistics for Business Applications I I
In addition to university-wide requirements, students completing a degree of Bachelor of Science with a major in Human Resource Management and a minor in business administration must complete the following coursework.

```
Additional requirements for the B.S. in Human Resource Management:
    MAT 109 Algebra for College Students or ACT >=23
    MGT 205 Business Management Principles
    STA 213 Statistics for Business Applications II
    BUS 330 Ethics in Managerial Decision-Making
    ECO }305\mathrm{ International Context of Business
    HRM 300 Introduction to Employee and Labor Relations
    HRM }301\mathrm{ Training and Employee Development
    HRM 302 Staffing/Recruiting/Talent Management
    HRM 303 Employment Law
    HRM 304 Wages and Benefits
    HRM 396 HR Internship
    HRM 480 Strategic HR
    MGT 300 Behavior in Organizations
    MGT }340\mathrm{ Human Resource Management
    MGT 490 Business Policy
```

Choose 2 of the following electives:
MGT 240 Managerial Communication
HRM 394 Special Topics: Human Resources

MGT 320 Managing a Diversity Workforce
MGT 350 Performance Management
MGT 360 International Management
MGT 410 Managing Change
The B.S. in Human Resource Management also requires completion of the minor in Business Administration. This minor includes courses previously listed under Selective Admission - Courses and the following four courses:

FIN 305 Principles of Finance
BIS 300 Management Information Systems
MGT 305 Operations Management
MKT 305 Principles of Marketing

## The Major in Management

The major in management is designed to provide graduates with the fundamental personal, interpersonal, conceptual, and technical knowledge and skills they need to manage organizational operations and resources effectively. All students are expected to master a variety of business communication forms (e.g., formal presentations, written reports) and to develop basic behavioral competencies necessary for those who intend to plan, organize, lead, and control the work of others in an organization. These behavioral competencies imperatively include team-building and small-group management skills. Management students must also analyze complicated business problems and seek to become adept at using both quantitative and qualitative decision-making techniques. Likewise, current and historically important theories of organization and human work behavior are studied so that students might acquire a context for understanding the complex and dynamic processes occurring in contemporary organizations. Required courses in the management major place an emphasis on learning that should facilitate long-term development as a management professional.

The focus of the management program is on the knowledge base and skills that underlie effective management practice irrespective of organi-zation-or industry-type. Thus, graduates of the management program typically seek college entry-level general management or managementtrainee positions in virtually any field-from banking to health care to manufacturing to sports or transportation.

The selective admission requirements for the major in management can be met by completing the following courses with a minimum gradepoint average of 2.50 in these ten courses:

## Selective Admission-Courses

CMST 101 Principles of Speech Communications
ENG 101 College Writing
MAT 114 Finite Mathematics
ACC 200 Principles of Accounting I—Financial
ACC 201 Principles of Accounting II—Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
ENG 291 Advanced Writing
STA 212 Statistics for Business Applications I
In addition to university-wide requirements, students completing a degree of Bachelor of Science with a major in Management and a minor in Business Administration must complete the following coursework.
Additional requirements for the B.S. in Management:
MAT 109 Algebra for College Students or ACT >=23
CMST 220 Interpersonal Communications
MGT 205 Introduction to Business and Management
MGT 206 Leadership Assessment and Development I
MGT 240 Managerial Communications
BUS 330 Ethics in Managerial Decision-Making
ECO 305 International Context for Business
ENTP 300 New Venture Creation
MGT 300 Behavior in Organizations

MGT 310 Managerial Behavior
MGT 340 Human Resources Administration
MGT 406 Leadership Assessment and Development II
MGT 490 Business Policy
Choose one of the following tracks:
Entrepreneurship Track
Choose three elective courses:
ENTP 333 New Venture Management
ENTP 375 Marketing Strategies for Entrepreneurial Businesses
ENTP 376 New Venture Financing
ENTP 377 Family Business Management
ENTP 378 Emerging Enterprise Law
ENTP 379 Corporate Entrepreneurship
Human Resource/Organizational Development Track
Choose three elective courses:
MGT 410 Managing Organizational Change
MGT 350 Performance Management
MGT 320 Managing a Diverse Workforce
MGT 394 Topics: Collective Bargaining and Labor Relations
Operations Management Track
Choose three elective courses:
MGT 410 Managing Organizational Change
MGT 415 Continuous Quality Improvement
MGT 306 Project Management
MGT 307 Supply Chain Management
The B.S. in Management also requires completion of the minor in Business Administration. This minor includes courses previously listed under Selective Admission-Courses and the following four courses:

FIN 305 Principles of Finance
BIS 300 Management Information Systems
MGT 305 Operations Management
MKT 305 Principles of Marketing

## MINORS

## The Minor in Entrepreneurial Studies

The focus of the minor in Entrepreneurial Studies is on generating ideas based on creativity, opportunity identification, feasibility studies, start-up activities, early stage strategies, and new initiatives within corporate environments. Students have unique opportunities to be involved in business partnerships and to find creative solutions to real business problems while completing their degrees. Business majors pursuing this minor are not required to take ENTP 150.

ENTP 150 Overview of Accounting (or ACC 200 and ACC 201)
ENTP 300 New Venture Creation
ENTP 333 New Venture Management
ENTP 497 Senior Portfolio: Writing the Business Plan

## Elective Courses in Entrepreneurship - Select Two:

ENTP 375 Marketing Strategies for Entrepreneurial Business
ENTP 376 New Venture Financing
ENTP 377 Family Business Management
ENTP 378 Emerging Enterprise Law
ENTP 379 Corporate Entrepreneurship
ENTP 396 Entrepreneurial Internship

## The Minor in Management

The required courses in the minor focus primarily on the behavioral aspects of management, i.e., the study of why people behave the way they do in work organizations and how managers can behave to effectively influence others and achieve organizational goals. Two elective courses in the minor allow students to explore areas of individual interest.

## Required Courses

CMST 220 Interpersonal Communications
MGT 205 Business Management Principles
MGT 300 Behavior in Organizations
MGT 310 Managerial Behavior
MGT 340 Human Resources Administration
Elective courses (any two; others may be chosen with an advisor's advance consent)

ENTP 300 New Venture Creation
ENTP 333 New Venture Management
ENTP 375 Marketing Strategies for Entrepreneurial Businesses
ENTP 376 New Venture Financing
ENTP 377 Family Business Management
ENTP 378 Emerging Enterprise Law
ENTP 379 Corporate Entrepreneurship
MGT 360 Comparative International Management
MGT 394 Selected Topics in Management

## POST-BACCALAUREATE CERTIFICATE

Students who have completed a bachelor's degree may pursue business certificate programs in the College of Business.

## Entrepreneurship

This certificate is designed to help entrepreneurs learn how to generate ideas, be more creative, recognize and exploit opportunities, become more marketable, start and grow a new company, or be more successful in any career. Whether you are driven by an idea, a passion for vocation, or the rewards of building an entrepreneurial organization, these courses offer the opportunity to combine an entrepreneurial mindset with the management skills necessary to launch and build a successful venture or to succeed in the large organization of your choice.

## Required Courses

ENTP 150 Overview of Accounting (or ACC 200 and ACC 201)
ENTP 300 New Venture Creation
ENTP 333 New Venture Management
ENTP 378 Emerging Enterprise Law
ENTP 497 Senior Portfolio: Writing the Business Plan

## CONTACTING THE DEPARTMENT

The Department of Marketing is located in BEP 475 and may be reached during business hours by phone at 859-572-5114. Visit the department's website at http://cob.nku.edu/marketing.

## PROGRAMS OFFERED

## FACULTY

Tracey Honeycutt Sigler, interim chair
Fred M. Beasley, Donna Crane, Vassilis Dalakas, Thomas Gamble, Aron Levin, Banwari Mittal, Margaret Myers, Matthew D. Shank, Doris Shaw, Eileen Weisenbach Keller

## Marketing Department

## Bachelor of Science

Marketing
Sports Business
Minors
Marketing

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## Certificates

Marketing Research
Sports Business

## GENERAL EDUCATION COURSES OFFERED

None

## BACHELOR'S DEGREE PROGRAMS

## Pre-major and selective admissions requirements

Students seeking majors in the Department of Management must meet selective admissions requirements. Some of the selective admissions courses may fulfill requirements in several mandatory categories: general education requirements, requirements for the major in business administration and requirements for the minor in business administration.

The selective admission requirements for the majors are listed separately. Certification of a major requires completion of the specified courses while maintaining a minimum grade-point average of 2.50 in those courses.

## Additional Requirements

Majors must also meet the requirements listed in the College of Business section above entitled "College-Wide Requirements."

## Transfer Students

Transfer students must complete at least $50 \%$ of the courses required for the major and at least $50 \%$ of the major discipline courses at Northern Kentucky University. For evaluation of transferred courses to meet this requirement and the requirement for 64 semester hours of non-business courses, transfer students are advised to make an advising appointment with the College of Business Advising Center, BEP 301, 859-572-6134 as soon as transcripts from previous institutions are available.

## The Major in Marketing

The major in marketing emphasizes the knowledge, skills, and concepts necessary for effective performance in the various functional areas of marketing (e.g., product development, distribution, marketing communications and, especially, applied marketing research). The required courses are designed to demonstrate the interaction of the social, economic, and cultural environments upon the management of an organization's marketing activities. The marketing electives offer an opportunity for students to choose one of the following tracks for more specialized knowledge according to their academic interests and career goals: International Marketing; Marketing Research; Sales; and Sports Marketing.

Career opportunities in marketing are extensive and diversified, including all aspects of product and brand management, distribution, retailing, sales, promotion, research and a variety of forms of marketing communications. The degree program in marketing prepares students for entry-level career positions by requiring them to demonstrate through research and case analysis the ability to apply marketing knowledge in practical situations. Marketing courses are also designed to encourage development and improvement of written and oral communication skills. Students are expected to make presentations, to write research reports and marketing plans, and to interact effectively with others in group assignments.

The selective admission requirements for the major in marketing can be met by completing the following courses with a minimum grade-point average of 2.50 in these ten courses: Selective Admission-Courses

CMST 101 Principles of Speech Communications
ENG 101 College Writing
MAT 114 Finite Mathematics
ACC 200 Principles of Accounting I—Financial
ACC 201 Principles of Accounting II—Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics

ECO 201 Principles of Microeconomics
ENG 291 Advanced Writing
STA 212 Statistics for Business Applications I
In addition to university-wide requirements, students completing a degree of Bachelor of Science with a major in Marketing and a minor in Business Administration must complete the following coursework.
Additional requirements for the B.S. in Marketing:
MAT 109 Algebra for College Students or ACT >= 23
PSY 100 Introduction to Psychology
SOC 100 Introduction to Sociology
STA 213 Statistics for Business Applications II
BUS 330 Ethics in Managerial Decision-Making
ECO 305 International Context for Business
MGT 300 Behavior in Organizations
MKT 320 Consumer Behavior
MKT 392 Introduction to Marketing Research
OST 311 Written Communication Systems
( or ENG 340 Business Writing)
MGT 490 Business Policy
MKT 480 Marketing Strategies and Policies
MKT 492 Advanced Marketing Research
Nine semester hours of required marketing electives (choose one of the following tracks; others may be chosen with an adviser's advance consent; students would also be allowed to take three MKT electives, including ENTP 375, SPB 305 and SPB 308, without declaring a track):

## International Marketing Track

MKT 360 International Marketing
And any two of the following (or others with consent of advisor):
ECO 344 Comparative Economic Systems
ECO 340 International Economics
FIN 415 International Finance

## Marketing Research Track

Any three of the following courses (or others with advisor's
consent):
STA 312 Elementary Survey Sampling
STA 314 Design and Analysis of Experiments
PSY 210 Research Methods in Psychology
SOC 320 Social Research
SOC 321 Applied Social Research
ECO 310 Introduction to Econometrics
Sales Track
MKT 306 Sales Management
MKT 310 Principles of Professional Selling
And one of the following (or others with consent of advisor):
CMST 220 Interpersonal Communication
CMST 303 Organizational Communication
Sports Marketing Track
SPB 305 Sports Marketing
And any two of the following courses (or others with advisor's consent):

SPB 308 Sports Promotion Tools
SPB 309 Sports Public Relations
SPB 330 Sports Legal Environment
SPB 480 Sports Business Strategies and Policies
The B.S. in Marketing also requires completion of the minor in Business Administration. This minor includes courses previously listed under Selective Admission-Courses and the following four courses:

FIN 305 Principles of Finance
BIS 300 Management Information Systems

MGT 305 Operations Management
MKT 305 Principles of Marketing

## The Major in Sports Business

Sports Business is the multidisciplinary study of business principles and processes applied to the sports industry.

The program is designed to prepare students for a variety of career and leadership opportunities in sport business and recreational management. These fields include event suppliers, event management and marketing, sports media, sports sponsorship, athlete services, sports commissions, sports lawyers, manufacturers and distribution, facilities and facility suppliers, teams, leagues, college athletics, and finance. Program objectives prepare the student for the demands involved in the operation of sport programs at various levels.

The selective admission requirements for the major in Sports Business can be met by completing the following courses with a minimum grade-point average of 2.50 in these ten courses:

## Selective Admission-Courses

CMST 101 Principles of Speech Communications
ENG 101 College Writing
MAT 114 Finite Mathematics
ACC 200 Principles of Accounting I-Financial
ACC 201 Principles of Accounting II—Managerial
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
ENG 291 Advanced Writing
STA 212 Statistics for Business Applications I
In addition to university-wide requirements, students completing a degree of Bachelor of Science with a major in Sports Business and a minor in Business Administration must complete the following coursework.

Additional requirements for the B.S. in Sports Business:
MAT 109 Algebra for College Students or ACT >= 23
STA 213 Statistics for Business Applications II
BUS 330 Ethics in Managerial Decision-Making
ECO 305 International Context for Business
MGT 300 Behavior in Organizations
MKT 306 Sales Management or MKT 310 Personal Selling
MKT 308 Advertising and Promotion
MKT 320 Consumer Behavior
SPB 309 Sports Public Relations
SPB 305 Sports Marketing
SPB 308 Sports Promotion Tools
SPB 330 Sports Legal Environment
CMST 303 Organizational Communications
SPB 396 Sports Business Internship
SPB 480 Sports Business Strategies and Policies
CMST 370 Advanced Public Speaking
MGT 490 Business Policy
The B.S. in Sports Business also requires completion of the minor in Business Administration. This minor includes courses previously listed under Selective Admission-Courses and the following four courses:

FIN 305 Principles of Finance
BIS 300 Management Information Systems
MGT 305 Operations Management
MKT 305 Principles of Marketing

## MINORS

## The Minor in Marketing

The required courses provide a general introduction to business organizations and their management (MGT 205), an overview of the market-
ing function (MKT 305), and exposure to the scientific study of buyer behavior (MKT 320). Elective courses allow students to pursue their own particular interests in the discipline.

## Required courses:

MGT 205 Business Management Principles
MKT 305 Principles of Marketing
MKT 320 Consumer Behavior or PSY 304 Consumer Psychology
Elective courses (any four; others may be chosen with an advisor's advance consent):

MKT 306 Sales Management
MKT 307 Retail Management
MKT 308 Advertising and Promotion
MKT 310 Principles of Professional Selling
MKT 340 Industrial Marketing
MKT 360 International Marketing
MKT 392 Introduction to Marketing Research
MKT 394 Selected Topics in Marketing
SPB 305 Sports Marketing
SPB 308 Sports Promotion Tools

## POST-BACCALAUREATE CERTIFICATES

Students who have completed a bachelor's degree may pursue business certificate programs in the College of Business.

## Marketing Research

Marketing research is the gathering and analyzing of information used to assist organizations in decision-making and has become a critical function for companies of all sizes. The research industry is especially vibrant in Greater Cincinnati and job opportunities in marketing research continue to grow in this area.

The Certificate in Marketing Research is designed prepare students with the academic foundation and skills necessary to successfully build a career in the marketing research industry. Students enrolled in this certificate program must meet all course pre-requisites except class standing and certification.
Required Courses
STA 213 Statistics for Business Applications II
MKT 320 Consumer Behavior
MKT 392 Introduction to Marketing Research
MKT 492 Advanced Marketing Research
Pre-requisite Courses
STA 212 Statistics for Business Applications I
ENG 340 or OST 311
MKT 305 Principles of Marketing

## Sports Business

Sports is a rapidly growing $\$ 350$ billion dollar industry that includes a variety of job opportunities in sports marketing, media, licensing, law, event management and facilities management, to name a few. Sports Business is the multidisciplinary study of business principles and processes applied to the sports industry. The sports business certificate is for individuals who seek a solid foundation in the principles and practices of the sports industry.

Students enrolled in this certificate program must meet all course prerequisites except class standing and certification.
Required Courses
SPB 305 Sports Marketing
SPB 308 Sports Promotion Tools
SPB 330 Sports Legal Environment
SPB 480 Sports Business Strategies and Policies
Pre-requisite Course
MKT 305 Principles of Marketing

## THE COLLEGE OF EDUCATION AND HUMAN SERVICES

## DEPARTMENTS

Kinesiology, Health, and Educational Foundations; Teacher Education and School Leadership; and Counseling, Social Work and Human Services

## CONTACTING THE COLLEGE

The College of Education and Human Services (COEHS) is located in Business, Education, and Psychology (BEP) Room 206 may be reached during business hours by phone at 859-572-6068, or by facsimile at 859-572-6623. Interested persons are invited to browse the college's website at http://www.nku.edu/~education

> Dr. Elaine Jarchow, dean $\begin{gathered}\text { jarchowe1@nku.edu } \\ \text { Dr. Paul Wirtz, associate dean for graduate programs } \\ \text { wirtzp1@nku.edu }\end{gathered}$ $\begin{gathered}\text { Dr. Carol Ryan, associate dean for undergraduate programs } \\ \text { ryanc@nku.edu }\end{gathered}$ Ms. Carole Ziegler, assistant to the dean zieglerc@nku.edu

## ADVISING CENTER COLLEGE OF EDUCATION AND HUMAN SERVICES <br> BEP 230/241 859-572-6944 <br> Dr. Carol Ryan, associate dean for undergraduate programs

DEPARTMENT OF KINESIOLOGY, HEALTH, AND EDUCATIONAL FOUNDATIONS

Albright Health Center (AHC) 104 859-572-6557
Dr. Mary Kirk, chair kirkmf@nku.edu
Ms. Lisa Schultz, academic specialist
Mr. Trey Morgan, coordinator Athletic Training Program
Kinesiology \& Health
Dr. Alar Lipping
Dr. Mike Gray
Dr. Janene Grodesky
Dr. Mary Kirk
Mr. Trey Morgan

## Educational Foundations

Dr. Kimberly Clayton-Code
Ms. Shannon Eastep
Dr. Lenore Kinne
Ms. Cathy Ingram
Dr. John Huss
Dr. Steven Smith

## DEPARTMENT OF TEACHER EDUCATION AND SCHOOL LEADERSHIP

The Department of Teacher Education and School Leadership is located in BEP 251 and may be reached during business hours by phone at 859-572-5624. Visit the college's website at http://www.nku.edu/~education for further information.

Dr. Suzanne Soled, chair<br>soleds1@nku.edu<br>Dr. Missy Jones, assistant chair jonesme@nku.edu<br>Dr. Mary Rozier, minority recruitment \& retention coordinator<br>Mr. George Frakes, MAT coordinator<br>Dr. James Allen, coordinator Instructional Leadership Program<br>Ms. Kathy Von Strohe, academic specialist

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Steve Crites
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## DEPARTMENT OF COUNSELING, SOCIAL WORK AND HUMAN SERVICES

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Dr. Willie L. Elliott, director, social work
Dr. Nan E. Littleton, director, mental health/human services
Dr. Doris Coy, Dr. Ken Engebretson, Dr. Gregory T. Hatchett,
Dr. Darrell Payne, Dr. Yvonne Quintanilla, Dr. Robyn Rennie,
Dr. Holly Riffe, Dr. Larry Sexton, Dr. Mark Shanley,
Dr. Karen Tapp, Dr. Linda Wermeling
Ms. Carol Schweitzer, academic specialist schweitzer@nku.edu

## PROGRAMS OFFERED BY THE COLLEGE OF EDUCATION AND HUMAN SERVICES

## Certificate Program

Social Justice
Bachelor of Arts
Interdisciplinary Early Childhood Education
Elementary Education
Middle Grades Education
Secondary Education
Physical Education - P-12 Certification
Recreation/Fitness

## Bachelor of Science

Athletic Training
Mental Health/Human Services

## Bachelor of Social Work

## Graduate Programs

Master of Arts in Education
Master of Arts in School Counseling/Rank I in Education
Master of Science in Community Counseling
Master of Arts in Instructional Leadership
Master of Arts in Teaching
Non-degree Fifth-Year Program
Non-degree Rank I Program
Non-degree Special Education Alternative Certification

## COLLEGE OF EDUCATION AND HUMAN SERVICES VISION/MISSION STATEMENT

## VISION

The College of Education and Human Services will prepare exemplary helping professionals who demonstrate the personal and professional knowledge, skills, and dispositions necessary to provide for the learning, growth, and developmental needs of individuals in an increasingly diverse, complex, and technological society.

## MISSION

The College of Education and Human Services is a diverse community of learners where excellence is achieved through collaboration and mutual support among the students, faculty, staff, and community. The mission of the College, in alignment with the university's core values, is to realize our vision through:
-attracting and graduating students of diverse backgrounds;
-recruiting and retaining outstanding, committed, collegial, and diverse faculty and staff;
-monitoring progress of, providing feedback to, and evaluating performances of students, faculty, and staff;
-promoting faculty professional development and scholarship;
-encouraging and modeling practices based on high standards and expectations, as defined by professional associations;
-demonstrating a commitment to ethical and professional standards;
-using creative and effective teaching enhanced with the application of current technology;

- providing a variety of meaningful field and clinical experiences that include working with diverse populations;
-seeking external funding for innovative programs that enhance learning, growth, and development to meet the needs of the community;
-engaging in continuous assessment that ensures program effectiveness;
-providing timely and accurate communication and information to internal and external constituencies;
-engaging with P-12 schools, university colleagues, community agencies, and other professionals in the communities to achieve our mutual goals and interests.


## Education Programs

## ADMISSION REQUIREMENTS TEACHER EDUCATION PROGRAMS

To apply for admission to the teacher education program, students must have completed the following requirements:

1. completed EDU 104 with a $C$ or better; preferably as a freshman.
2. earned a grade-point average of at least 2.50 ;
3. earned a minimum of 48 semester hours of coursework;
4. achieved a 21 composite on the ACT; 990 combined on the SAT; or approved scores on the PPST/CBT);
5. Successfully completed a computer course (INF 105) or a computer proficiency exam. (except music majors)
Professional Semester I
To receive admission to the teacher education program, students must have fulfilled all of the following requirements by the end of the admission semester:
6. Earned 64 semester hours of coursework;
7. Earned an overall grade-point average (GPA) of at least 2.50;
8. Achieved a $B$ or better in SPE 101 or equivalent;
9. Achieved a $B$ or better in ENG 291 or equivalent or passed the writing sample examination;
10. Signed a curriculum contract;
11. Earned a minimum grade of $C$ in EDU 300, 305, 313, EDS 360 and the Admissions Practicum;
12. Filed three recommendations from persons familiar with the candidate's potential to become an effective teacher;
13. Received approval of the teacher education committee; and
14. Submitted an approved portfolio.

## ACCREDITATIONS/AFFILIATIONS FOR EDUCATION

Northern Kentucky University is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and by the Southern Association of Colleges and Schools (SACS). It is authorized by the Kentucky Education Professional Standards Board (EPSB) to offer teacher preparation programs leading to initial Kentucky teacher certification.

## TRANSFER STUDENTS

At the time of application, a student will receive a transfer credit approval report. To view how courses equate to general education courses, please access Norse Express for students and click on real-time degree audit. Any request for re-evaluation of coursework to fulfill general education should be directed to the General Education Office, SL 401 or Transfer Services, AC 302.

The COEHS Advising Office (BEP 230) will work in conjunction with the department involved and will decide initial determination of equivalencies. Any appeal of the decision should be referred directly to the General Education Office, SL 401 if it is a general education course and to the COEHS Advising Center for all other courses. The decision made by the department after an appeal will then be final.

The applicability of prior coursework in the field of education will be determined by the Advising Center at the time the student signs the curriculum contract (during the admissions semester) following these guidelines:
a. Is the course equivalent to the Northern Kentucky University requirement? This decision is made by the above coordinator in conjunction with the department chair and lead instructor for the course.
b. How old is the course? Due to "recency of preparation" requirements, as determined by the College of Education and Human Services, no professional education course over nine years old can be used to recommend a student for certification. Therefore, a decision must be made whether the candidate will finish the program before an equivalent course will be older than nine years (i.e., if the student took a course equivalent to EDU 305 in spring 1993, that student must finish his/her program by the end of spring 2002 semester). Once these decisions are made, the courses in question are entered onto the curriculum contract.

## EDUCATION PROGRAMS

Preparation is required in four areas as follows: (1) a broad, comprehensive background in the liberal arts; (2) training in pedagogy through a sequence of professional courses; (3) extensive laboratory experiences provided by the University in cooperation with local school systems; and (4) in-depth preparation in the content area(s) leading to certification.

Successful completion of a teacher education program constitutes the first step toward attaining teacher certification in Kentucky. Initial certification of all new teachers also requires successful completion of appropriate written tests prior to certification. Additionally, all new teachers seeking initial certification in Kentucky will serve an internship. The examination and internship components are administered by the Kentucky EPSB and are not considered part of the NKU teacher education program. It is the responsibility of students to notify the College of Education and Human Services of an impending graduation date at least 30 days in advance. At that point, an institutional recommendation will be prepared for submission to the Kentucky Educational Professional Standards Board. Students who plan to teach in other states should work closely with the

## 128 NORTHERN KENTUCKy UnIVERSITY

Teacher Certification Officer (BEP 230) to determine the requirements in those states with reference to reciprocity.

Responsibility for developing procedures and policies and for resolving all grievances in the teacher education program rests with the Teacher Education Committee, which is also responsible for admitting students into the teacher education program and to student teaching. The committee, chaired by the dean of education or his/her designee, is composed of teachers, school administrators, student representatives, and faculty from each department that prepares teachers.

Changes may be made in the teacher education programs to meet state requirements. Students must, therefore, obtain the current program requirements from the Advising Office. The advisement process is particularly crucial for teacher education students. It is suggested that freshmen or other interested students declare a pre-major in a teacher education field. This procedure will result in assignment to a teacher education adviser familiar with the current curricular and admission requirements and with any impending changes that may occur prior to a student's admission semester. All students pursuing teacher education are advised by education faculty.

All students who are pre-education majors or who are enrolled in the teacher education program should check their e-mail on a regular basis to obtain updated information regarding the teacher education program.

## I. ELEMENTARY EDUCATION (P-5)

The elementary education (P-5) program leads to the degree of Bachelor of Arts. The advisement process is particularly crucial for teacher education students. It is suggested that freshmen or other interested students declare a pre-major in elementary education. This procedure will result in assignment to a teacher education adviser familiar with the current curricular and admission requirements and with any impending changes that may occur prior to the student's admission semester.

## A. Program Requirements for Elementary Education (P-5) 1. General Education Requirements

Students are responsible for fulfilling the general education requirements outlined in this catalog in effect at their entrance into the university. To fulfill program and university requirements at the same time, students should make the following choices within the University's general education program.

## a. Oral communication

SPE 101;
b. Mathematics

STA 113.
c. Natural Sciences

BIO 120 with laboratory and an additional science course (CHE, AST, GLY, or PHY) with laboratory or SCI 110 and SCI 111
d. Behavioral sciences

PSY 100.
e. 6 hours in history and/or geography.

## 2. Professional Education Courses

Students complete their teacher education preparation program within professional semesters. Students should meet with their advisor for more details and/or program changes.

## a. Admission Practicum

Students who have met the requirements for application for admission to the teacher education program may enroll in EDU 307.
b. Professional Semester I

To be admitted to professional semester I, students must have
(1) completed successfully the admission semester and Admission Practicum for Elementary Grades and been admitted to the teacher education program (minimum grade of $C$ in all admission courses);
(2) completed successfully 6 semester hours of English Composition, PSY 100, and SPE 101;
(3) submitted an approved portfolio.

Students who have been admitted to professional
semester I may enroll in EDU 302, 310, 314, 390 and EDS 322;
c. Professional Semester II

To be admitted to professional semester II, students must
have
(1) completed successfully professional semester I and Elementary Practicum I;
(2) completed successfully 6 semester hours of history/geography courses (minimum grade $C$ );
(3) completed a biological science course with laboratory (minimum grade $C$ );
(4) completed a physical science course with laboratory (minimum grade $C$ );
(5) completed MAT 140 (minimum grade $C$ );
(6) completed MAT 141 (minimum grade C);
(7) completed STA 113 or STA 205 if math emphasis (minimum grade $C$ )
(8) submitted an approved portfolio;

Students who have been admitted to professional semester II may enroll in EDU 306, 308, 312, 315, and 392.
d. Student Teaching

Students must complete an application for admission to student teaching in elementary education/professional semester III the semester before student teaching. To receive admission to student teaching/professional semester III, students must have
(1) earned an overall grade-point average of at least 2.50;
(2) completed all professional education courses and practica (including ARTE 280, ENG 386, HEA 250, STA 113, MAT 140, MAT 141, MUS 260, and PHE 250) with a grade of at least $C$ in each course and with a grade-point average of at least 2.50;
(3) completed all coursework in the emphasis area with a grade-point average of at least 2.50 ;
(4) developed those professional dispositions deemed necessary for successful completion of student teaching;
(5) passed a current medical examination, including a tuberculosis test, from a licensed physician;
(6) completed two semesters in residence (a minimum of 24 semester hours);
(7) received approval by the department of the student's major;
(8) received approval by the teacher education committee;
(9) earned 150 clock hours (verified) of approved clinical/ field work at the appropriate level;
(10) submitted an approved portfolio
(11) complete a pre-student teaching interview.

Students who have been admitted to student teaching may enroll in EDU 494

## 3. Related Courses

ART 280; ENG 386; HEA 250; MAT 140, 141; MUS 260; PHE 250. Must be completed with a $C$ or better.
4. Emphasis Areas

Students in elementary education must successfully complete all coursework listed on the curriculum contract in at least one of the following emphasis areas
a. English/Communications
b. Mathematics
c. Science
d. Social studies
e. Special Education

Information on appropriate coursework for each of the emphasis areas is available in the Office of Student Services in the College of Education.

## 5. Special Education Certification

Students majoring in elementary grades education may complete a program leading to certification for teaching programs for children and youth with learning and behavior disorders (LBD). This program results in dual certification: P-5 elementary grades and P-12 special education (LBD).

## B. Recommendation for Teacher Certification in Elementary Education (P-5)

To be recommended for teacher certification, students must have
a. completed successfully all program requirements;
b. achieved good standing at NKU;
c. attained an overall grade-point average of at least 2.50;
d. attained a grade-point average of at least 2.50 in all professional education courses and practica;
e. completed a required emphasis area (minor) with a gradepoint average of at least 2.50;
f. submitted an approved portfolio;
g. completed successfully the Praxis II examination, the PLT examination, and other examinations required for teacher certification in Kentucky;
h. filed a TC- 1 form by the required date (complete with official transcripts from all schools attended, with the exception of Northern Kentucky University).

## II. SPECIAL EDUCATION

Students at Northern Kentucky University who wish to complete the P-12 preparation program in special education must also complete certification requirements for teaching certificates in the P-5 elementary program, the middle grades program or a content major in secondary education. The special education program at NKU is based on the premise that teachers should be prepared to teach all children regardless of each child's ability or disability. In Kentucky, regular and special education teachers work in partnership to provide services to children with disabilities in inclusive settings.

The advisement process is particularly crucial for teacher education students. It is suggested that freshmen or other interested students declare a pre-major in education. A student who expresses an interest in pursuing certification in special education will be assigned an adviser from the College of Education and Human Services who is familiar with the current curricular and admission requirements and with any impending changes that may occur prior to the student's admission semester.

## A. Program Requirements for Special Education

Students must complete the following requirements as well as the requirements for elementary education (P-5), the middle grades program or a secondary content major.

## 1. General Education Requirements

Students are responsible for fulfilling the general education outlined in the catalog in effect at their entrance into the university. To fulfill program and University requirements at the same time, students should make the following choices within the University's general education framework.
a. Oral communication

SPE 101
b. Behavioral sciences

PSY 100
2.Professional Education Courses

Students complete their teacher education preparation program within professional semesters. The professional semesters in special education will be scheduled in conjunction with the student's elementary, middle, or secondary professional semesters. Students should meet with their adviser for more details, especially in regard to prerequisites for each semester. They should also
consult the appropriate sections for the P-5 elementary, middle grades, or secondary education requirements as well.

## a. Admission Practicum

Students who have met the requirements for application for admission to the teacher education program may enroll in either EDU 307 (P-5) or 309 (middle grades) or 311 (secondary).
b. Professional Semester I

Students who have met the prerequisites for professional semester I may enroll in the appropriate elementary, middle grades, or secondary courses.
c. Professional Semester II

Students who have met the prerequisites for professional semester II may enroll in the appropriate elementary, middle grades or secondary courses.
c. Professional Semester III Special Ed Semester (Fall only)

Students who have met the prerequisites for professional
semester III may enroll in EDS 362, 464, 472, 473, and 570.
d. Student Teaching

Students must complete an application for admission to student teaching in special education the semester before student teaching. To receive admission to student teach, students must have
(1) earned an overall grade-point average of at least 2.50;
(2) completed all professional education courses and practica with a grade of at least $C$ in each course and with a gradepoint average of at least 2.50;
(3) developed those professional dispositions deemed necessary for successful completion of student teaching;
(4) passed a current medical examination, including a tuberculosis test, from a licensed physician;
(5) completed two semesters in residence (a minimum of 30 semester hours);
(6) received approval by the department of the student's major;
(7) received approval by the teacher education committee;
(8) earned 150 clock hours (verified) of approved clinical/ field work at the appropriate level;
(9) submitted an approved portfolio,
(10) completion of pre student teaching interview.

Students who have been admitted to student teaching may enroll in EDU 492 (elementary), EDU 493 (middle grades), or EDU 497 (secondary).
3. Related Courses

ENG 386; MAT 140, 141; HEA 250, PHE 250, ART 280, MUS 260; PHE 200 and a 100 level PHE activity course (middle grades or secondary). Must be completed with a $C$ or better.

## B. Recommendation for Certification in Special Education

To be recommended for teacher certification, students must have
a. completed successfully all program requirements;
b. achieved good standing at NKU;
c. attained an overall grade-point average of at least 2.50;
d. attained a grade-point average of at least 2.50 in all professional education courses and practica;
e. submitted an approved portfolio;
f. completed successfully the Praxis II examination (and other examinations required for teacher certification in Kentucky);
g. filed a TC-1 form by the required date (complete with official transcripts from all schools attended, with the exception of Northern Kentucky University).

## III. BIRTH TO KINDERGARTEN: INTERDISCIPLINARY EARLY CHILDHOOD EDUCATION (IECE) CERTIFICATION PROGRAM

Students who wish to be certified to teach in Kentucky's high-risk birth-through-three programs (Kentucky's Early Intervention Systems) or in Kentucky's state funded preschool programs, serving three-to five-year olds with and without disabilities, should select the Interdisciplinary Early Childhood Education (IECE) program as their major. All IECE majors and pre-majors must see their advisor.

## A. Program Requirements for Interdisciplinary Early Childhood Education (IECE)

1. General Education Requirements

Students are responsible for fulfilling the general education requirements outlined in this catalog in effect at their entrance into the University. To fulfill program and University requirements at the same time, students should make the following choices within the University's general education framework: SPE 101, PSY 100, and BIO 120 with laboratory and an additional lab science. Students choosing to take SCI 110 and SCI 111 are not required to take BIO 120.
2. Additional Pre-Education Requirements

To enter any Education program students are required to successfully complete EDU 104, and to demonstrate computer proficiency by completing a course or by passing a computer proficiency exam. Students must also complete 6 semester hours of English, PSY 100, and SPE 101. Students must have a minimum GPA of 2.5 , and a minimum ACT of 21 (or SAT 990 or successfully complete all three portions of the Praxis I exam) to enter the IECE program.
3. Professional Studies Courses

Students complete their teacher education preparation program within professional semesters. The IECE program is interdisciplinary and involves collaboration with the areas of special education, human services, and social work. Student should meet with their advisor for more details, especially in regard to prerequisites for each semester and to any curricular issues that may affect their program.
a. Admission Practicum

Students who have met the requirements for application for admission to the teacher education program may enroll in EDU 303. Successful completion of the admission requirements include: having a minimum grade of $C$ in EDU 301, 305, 313, EDS 360, and either EDU 300 or PSY 319; signing a curriculum contract; and submitting an approved portfolio.
b. During the IECE program of studies, students will be required to complete several related courses -- HEA 135, HSR 500, SWK 510, EDS 362, ENG 386. Your advisor will help you include these courses in your schedule
c. Professional Semesters I, II, III, and Student Teaching

After successfully completing the Admission semester, and being admitted to the Education program, students will take four professional semesters. These semesters will build content knowledge and culminate with student teaching. They have been organized as shown below. Students should continually see their advisor throughout the program. Students must earn a minimum grade of $C$ in all coursework. Addi-
tionally, students must have a minimum 2.5 GPA overall to graduate.

## B. Birth to Kindergarten: IECE Certification Program <br> Professional Semester I <br> EDU 395 IECE Practicum I <br> ..... 2 <br> EDS 562 Early Childhood Special Education <br> ..... 3 <br> EDS 322 Plan and Implement Instruction for Exceptional Children 2EDU 552 Infant and Toddler Education and Programming <br> 3 <br> Professional Semester II <br> EDU 397 IECE Practicum II <br> ..... 2 <br> EDU 550 Methods and Curriculum in IECE <br> ..... 3 <br> EDU 564 Collaboration in IECE <br> ..... 3 <br> PHE 330 Motor Development <br> ..... 3 <br> Professional Semester III <br> EDU 566 Assessment in Early Childhood <br> ..... 3 <br> EDU 568 Administration and Supervision in IECE <br> ..... 3 <br> EDU 398 IECE Practicum III <br> ..... 2 <br> Student Teaching <br> EDU 491 Student Teaching <br> 12

## IV. MIDDLE GRADES EDUCATION (5-9)

Successful completion of the middle grades program leads to the degree of Bachelor of Arts and is the first step toward attaining certification to teach in a middle grades program in Kentucky. Students wishing to enroll in the middle grades program must follow the admissions guidelines under each program. It is suggested that freshmen or other interested students declare a pre-education major in middle grades education. This procedure will result in assignment to a teacher education advisor familiar with the current curricular and admission requirements and with any impending changes that may occur prior to the student's admission semester.

## A. Program Requirements for Middle Grades Education

## 1. General Education Requirements

Students are responsible for completion of the general education outlined in the catalog in effect at their entrance into the University. To fulfill program and university requirements at the same time, students should make the following choices within the University's general education framework.
a. Oral communication

SPE 101 (the University's competency examination is not sufficient)
b. Behavioral sciences

PSY 100 must be included.
2. Program Requirements

Students complete their teacher education preparation program within professional semesters. The sequence of three professional semesters for middle grades education (5-9) with associated prerequisites and related requirements is as follows:
a. Admission Practicum

Students who have met the requirements for application for admission to the teacher education program (see "Admission Requirements for all Teacher Education Programs" at the beginning of the "Education" section of this catalog) may enroll in EDU 309.
b. Professional Semester I
(1) To be admitted to professional semester I, students must have successfully completed the admission semester courses (achieving at least a $C$ in EDU 300, 305, 313, 309 and EDS 360) submitted an approved portfolio; and been fully admitted to the teacher education program.
(2) To successfully complete professional semester I and be eligible to enroll in professional semester II, students must complete EDU 344, 315, 391, EDS 322 and one of the two methods courses pertaining to their selected teaching fields: EDU 345, 346, 347, or 348, with $C$ or better, and submit a revised and updated portfolio.
c. Professional Semester II

To successfully complete professional semester II, and be eligible to enroll in student teaching, students must complete EDU 304, EDU 394, EDU 318, and one of the following methods courses pertaining to their selected teaching fields: EDU 345, 346, 347, 348, with a C or better, plus submit and receive approval for a revised and updated portfolio.
d. Student Teaching

Student Teaching. Students must complete an application for admission to student teaching during the middle grades professional semester II. To receive admission to student teaching, students must have
(1) earned an overall grade-point average of at least 2.50;
(2) completed all professional courses and practica (including PHE 200 and a 100 -level PHE activity course) with a grade of at least $C$ in each course and with a grade-point average of at least 2.50 on a 4.00 scale.
(3) completed all coursework in the two teaching fields with a grade-point average of at least 2.50;
(4) developed those professional dispositions deemed necessary for successful completion of student teaching;
(5) passed a current medical examination, including a tuberculosis test, from a licensed physician;
(6) completed two semesters in residence (a minimum of 30 semester hours);
(7) received approval by the department of the student's major;
(8) received approval by the teacher education committee;
(9) earned 150 clock hours (verified) of approved clinical/field work at the appropriate level;
(10) submitted an approved portfolio;
(11) complete pre-student teaching interview
3. Related Coursework

Students in the middle grades program must complete 3 semester hours of physical education coursework including PHE 200 Concepts of Lifetime Fitness (2 semester hours) and a 100-level PHE activity course (1 semester hour).
4. Teaching Fields

Students in middle grades education must successfully complete all coursework (with a grade-point average of at least 2.50 ) listed on the curriculum contract for two of the following teaching fields. To take the appropriate methods courses students must have completed at least 12 semester hours of content courses.
a. English/Communication
b. Mathematics
c. Science
d. Social studies
e. Special education

Information on appropriate coursework for each of the teaching fields is available in the COEHS Advising Center BEP 230.
5. Special Education Certification Students majoring in middle grades education may complete a program leading to certification for teaching programs for children and youth with learning and behavior disorders (LBD). This program results in dual certification: 5-9 middle grades and P-12 special education (LBD).

## B. Recommendation for Certification in Middle Grades Edu-

 cationTo be recommended for teacher certification, students must have a. completed successfully all program requirements, including student teaching;
b. achieved good standing at NKU
c. earned an overall grade-point average of at least 2.50;
d. completed all professional education coursework and practica with a grade-point average of at least 2.50;
e. completed all coursework required for the two teaching fields with a grade-point average of at least 2.50;
f. completed successfully the Praxis II and the PLT Praxis examination (or other examinations required for teacher certification in Kentucky);
g. submitted an approved portfolio.
h. filed a TC-1 Form by the required date complete with official transcripts from all schools attended, with the exception of NKU).

## Middle Grades Extension Program

This program is for elementary or secondary pre-service and in-service teachers who want to extend their certification to middle grades (5-9).

## A. Requirements for Elementary Pre-or In-Service Teachers

(All courses may also be listed as EDU 599 courses)

1. Foundation Courses

EDU 344 Fundamentals of Middle Grades - 2 hours EDU 318 Middle grades Classroom Management - 1 hour
2. Appropriate Methods Courses

EDU 345 Teaching Language Arts in Middle Grades - 3 hours EDU 346 Teaching Science in Middle Grades - 3 hours EDU 347 Teaching Mathematics in Middle Grades - 3 hours EDU 348 Teaching Social Studies in Middle Grades - 3 hours
Complete required content courses for the middle grades certification area (see the middle grades curriculum contract).
B. Requirements for Secondary Pre- or In-Service Teachers (All courses may also be listed as EDU 599 courses)

1. Foundation Courses

EDU 344 Fundamentals of Middle Grades - 2 hours
EDU 318 Middle Grades and Secondary Climate Classroom Management - 1 hour
EDU 530 Reading/Writing Across the Curriculum - 3 hours OR
EDG 630 Language/Learning Across the Curriculum - 3 hours
2. Appropriate Methods Courses

EDU 345 Teaching Language Arts in Middle Grades - 3 hours
EDU 346 Teaching Science in Middle Grades - 3 hours
EDU 347 Teaching Mathematics in Middle Grades - 3 hours
EDU 348 Teaching Social Studies in Middle Grades - 3 hours
Complete required content courses for the middle grades certification area (see the middle grades curriculum contract)

The foundations courses are taught as EDU 599 classes during summer semesters of odd years; the methods courses are taught as EDU 599 during the fall semester each year.

Content courses are taught at various times - please contact the appropriate NKU department for additional information concerning a specific content course.

## V. SECONDARY EDUCATION (8-12)

Successful completion of the secondary education program leads to a bachelor's degree and is the first step toward attaining certification to teach in a secondary school program in the teaching field in Kentucky. Students wishing to enroll in the secondary education program must follow the

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admissions guidelines under "Admission Requirements for all Teacher Education Programs" listed at the beginning of the "Education" section of this catalog. It is suggested that freshmen or other interested students declare pre-secondary education. This procedure will result in assignment to teacher education and content area advisers familiar with the current curricular and admission requirements and with any impending changes that may occur prior to the student's admission semester.

Students in secondary education major and receive their bachelor's degree from their content area department.

## A. Program Requirements for Secondary Education

1. General Education Requirements for Undergraduate Students Students are responsible for fulfilling the general education requirements outlined in this catalog in effect at their entrance into the University. To fulfill program and University requirements at the same time, students should make the following choices within the University's general education framework:
a. Oral communication

SPE 101 (the University's competency examination is not sufficient)
b. Behavioral sciences

PSY 100 must be included.
2. Program Requirements

Students complete their teacher education preparation program within professional semesters.
a. Admission Semester

Students who have met the requirements for application for admission to the teacher education program (see "Admissions Requirements for all Teacher Education Programs" at the beginning of the "Education" section of this catalog) may enroll in EDU 300, 305, 313, 311, and EDS 360.
b. Professional Semester I

Students must have completed successfully the admission courses (achieving at least a $C$ in EDU 300, 305, 313, 311 and EDS 360) submitted an approved portfolio; and been fully admitted to the teacher education program.
c. To successfully complete professional semester I, students must complete EDU 318, 324 and EDS 322; EDU 393; and submit an approved revised and updated portfolio (achieving at least a $C$ in EDU 318, 324, 393 and EDS 322).
d. Professional Semester II

To successfully complete Professional Semester II, students must complete EDU 315. EDU 396, and submit an approved and updated portfolio (achieving at least a $C$ in EDU 315, the methods course, and EDU 396).
e.) Students take the appropriate methods course during either Professional Semester I or II.
f. Student Teaching

Students must complete an application for admission to student teaching in the secondary school during the semester before student teaching. To receive admission to student teaching, students must have
(1) earned an overall grade-point average of at least 2.50;
(2) completed all professional courses, practica, and related courses with at least a $C$ in each course and with a grade-point of at least 2.50;
(3) completed $85 \%$ of the coursework in the teaching fields with a grade-point average of at least 2.50 ; developed those professional dispositions deemed necessary for successful completion of student teaching;
(5) passed a current medical examination, including a tuberculosis test, from a licensed physician;
completed two semesters in residence (a minimum of 30 semester hours);
received approval by the department of the student's major;
received approval by the teacher education committee;
earned 150 clock hours (verified) of approved clinical/field work at the appropriate level;
submitted an approved portfolio; complete a pre-student teaching interview.
4. Related Coursework

Students in the secondary education program must complete 3 semester hours of physical education coursework including PHE 200 (2 semester hours) and a 100-level PHE activity course (1 semester hour).
5. Areas of Certification

Students in secondary education must complete at least one teaching field that is recognized as an area for certification by Kentucky. They must also successfully complete all coursework listed on the curriculum contract in their specialization area with a GPA of at least a 2.50 . Coursework required in the areas of certification can be found in this catalog under the major departmental sections. The University has requested and received approval to offer the following areas for certification in secondary education, grades 8-12.

```
Areas for Certification 8-12
    English
    Mathematics
    Biology
    Chemistry
    Physics
    Earth/Space Science
    Social Studies
    Business education (grades 5-12)
    Certification endorsement computer science
```


## Specialty Areas with Grades P-12 Certification

Art
Foreign language (Arabic, Chinese, French, Japanese,
Spanish, German endorsement)
Health education (must be paired with another certification
area)
Music
Physical education
6. Specialty Areas: Primary-12 Certification Programs

Students wishing to seek certification in any of the P-12 programs should follow the curriculum contracts for those programs. Information for each of the P-12 certification can be obtained from the department in which the program is housed or from the Advising Office in the College of Education and Human Services.
7. Special Education Certification

Students in the secondary education program may receive a teaching certificate for teaching in programs for youth with learning and behavior disorders (LBD). This program results in dual certification: 8-12 secondary education and P-12 special education (LBD). The program requires 38 semester hours of coursework in special education plus student teaching in a program for youth with learning and behavior disorders. For more information on this program contact the Department of Initial Certification in the College of Education.

## B. Recommendation for Certification in Secondary Education

To be recommended for teacher certification, students must have:
a. completed successfully all program requirements, including student teaching
b. achieved good standing at NKU
c. earned an overall grade point average of at least 2.50
d. completed all professional education coursework and practica with a grade-point average of at least 2.50
e. completed all coursework required for the teacher certification content area with a grade-point average of at least 2.50
f. completed successfully the Praxis examinations (and any other examinations required for teacher certification in Kentucky).
g. submitted an approved portfolio
h. filed a TC-1 form by the required date (complete with official transcripts from all schools attended, with the exception of NKU).

## VI. HEALTH, RECREATION/FITNESS PROGRAMS

Students interested in pursuing a career in health and physical education may choose from one of the following options: physical education P 12 certification program; the specialization in health education, which leads to certification in health education $\mathrm{P}-12$; the specialization in recreation/fitness, which is a non-teaching option preparing students for leadership roles in community and corporate fitness programs; the major in athletic training. The following minors are also available to students: health education, physical education, and sports medicine.

## A. Major in Physical Education P-12 Certification

Successful completion of the physical education P -12 program leads to the degree of Bachelor of Arts and is the first step toward attaining certification to teach in an elementary, middle, or secondary physical education program in Kentucky. Students wishing to enroll in the program must follow the "Admission Requirements for all Teacher Education Programs" listed at the beginning of the "Education" section of this catalog. It is suggested that freshmen or other interested students declare physical education $\mathrm{P}-12$ as a major. This procedure will result in assignment to a physical education adviser familiar with any impending changes that may occur prior to a student's admission semester.

## 1. Program Requirements for Physical Education P-12

a. General education requirements for undergraduate students. Undergraduate students majoring in physical education are responsible for completion of the general education requirements outlined in the catalog in effect at their entrance to the University. To fulfill program and University requirements at the same time, students should make the following choices within the University's general education framework:
(1) Oral communication

SPE 101
(2) Humanities/Fine arts

A course in a fine art (ART, MUS, or TAR)
(3) Behavioral sciences

PSY 100 must be included.
(4) INF 105.
b. General education requirements for post-bachelor's students seeking P-12 physical education. Students must show that they have completed general education courses and experiences in the liberal arts and sciences and have developed theoretical and practical knowledge. This includes completing
(1) courses in both written and oral skills;
(2) courses in fine arts, history, literature, mathematics, psychology, science (with a laboratory), and social sciences; and
(3) courses in race/gender and global perspectives

## c. Program Requirements

Students complete their teacher education program within professional semesters. Students must follow Middle Grades and Secondary Grades General Education Framework contract.
(1) Admission Practicum

Students who have met the requirements for application for admission to the teacher education program (see "Admission Requirements for all Teacher Education Programs" at the beginning of the "Education" section of this catalog) may enroll in EDU 311.
(2) Admission to Professional Semester I

To be admitted to professional semester I, students must have successfully completed the admission semester (achieving at least a $C$ in EDU 300, 305, 311, and 313) and the admission practicum; submitted an acceptable portfolio; and been fully admitted to the teacher education program.
(3) Professional Semester I

To successfully complete professional semester I and to be eligible to enroll in professional semester II or student teaching, students must complete PHE 430 and PHE 490 in fall semester or PHE 480 and PHE 491 in spring semester with at least a $C$ and submit a acceptable portfolio. Note: Professional semester I and II do not have to be taken in order.
(4) Professional Semester II

To successfully complete professional semester II and to be eligible to enroll in professional semester III, student teaching, students must complete PHE 480 and PHE 491 in spring semester or PHE 430 and PHE 490 in fall semester with at least a $C$ and submit a acceptable portfolio.
(5) Professional Semester III: Student Teaching

Students must complete an application for admission to student teaching in the professional semester I or II (whichever is taken last) prior to student teaching. To receive admission to student teaching, students must have
(a) earned an overall grade-point average of at least a 2.50;
(b) completed all professional courses, practica, and related courses;
(c) completed all coursework in physical education and minor areas with a grade-point average of at least 2.50;
(d) earned a minimum of 91 semester hours (senior standing);
(e) developed those professional characteristics deemed necessary for successful completion of student teaching;
(f) passed a current medical examination, including a tuberculosis test, from a licensed physician;
(g) completed two semesters in residence (a minimum of 24 semester hours);
(h) received approval by the department of the student's major;
(i) received approval by the teacher education committee;
(j) earned 150 clock hours (verified) of approved clinical/ field experience at the appropriate level;
(k) submitted an approved portfolio;
(l) completed pre-student teaching interview

| 2. Physical Education P-12 Course Requirements <br> a. Professional Education Courses |  |
| :---: | :---: |
| EDU 300 Human Growth and Development | 3 |
| EDU 305 Introduction to Education | 2 |
| EDU 311 Admission Practicum | 2 |
| EDU 313 Computer Applications for Teachers | 2 |
| PHE 430 Curriculum and Methods for Teaching Elementary Physical Education | 3 |
| PHE 490 Practicum in Teaching Elementary Physical Education | 1 |
| PHE 480 Curriculum and Methods for Teaching Middle and Secondary Physical Education | 3 |
| PHE 491 Practicum in Teaching Middle School and Secondary Physical Education | 1 |
| EDU 496 Student Teaching in Secondary School | 12 |
| Total | 29 |
| b. Major Content Courses |  |
| PHE 125 Introduction to Physical Education | 3 |
| HEA 135 Safety and First-Aid | 3 |
| PHE 200 Concepts of Lifetime Fitness | 2 |
| PHE 230 Motor Skill and Fitness Activities for Children | 3 |
| PHE 240 Performance and Analysis of Sport Skills I (volleyball \& soccer) | 2 |
| PHE 241 Performance and Analysis of Sport Skills II (baseball, golf and softball) | 2 |
| PHE 242 Performance and Analysis of Sport <br> Skills III (tennis, badmitton and other racquet sports) | 2 |
| PHE 243 Teaching Gymnastics | 2 |
| PHE 318 Advanced Lifesaving or | 2 |
| PHE 319 Water Safety Instructor | 3 |
| PHE 330 Motor Development | 3 |
| PHE 360 Statistics and Measurement in |  |
| Physical Education | 3 |
| PHE 370 Biomechanics | 3 |
| PHE 385 Sociological and Psychological |  |
| Dimensions of Sport and Physical Activity | 3 |
| PHE 440 Physiology of Exercise | 3 |
| PHE 500 Adapted Physical Education | $\underline{3}$ |
| Total | 43-45 |
| c. Required Related Courses |  |
| BIO 208 Human Anatomy and Physiology I | 4 |
| BIO 208L Human Anatomy and Physiology I Laboratory | 0 |
| BIO 209 Human Anatomy and Physiology II | 4 |
| BIO 209L Human Anatomy and Physiology II |  |
| Laboratory | $\underline{0}$ |
| Total | 8 |

Physical Education P-12 Course Requirements
EDU 300 Human Growth and Development2
EDU 311 Admission Practicum ..... 2PDE 430 Corpur Applich3Education1Middle and Secondary Physical Education3
Secondary Physical Education1229
PHE 125 Introduction to Physical Education ..... 3
EA 135 Safty2PHE 230 Motor Skill and Fitness Activities forChildren
Skills I (volleyball \& soccer)
Skills II (baseball, golf and softball) ..... 2
Skills III (tennis, badmitton and other racquet sports)2
PHE 318 Advanced Lifesaving or ..... 2PHE 330 Motor Development3
Physical Education ..... 3
3
PHE 440 Physiology of Exercise343-45BIO 208 Human Anatomy and Physiology I4
Laboratory ..... 0
BIO 209 Human Anatomy and Physiology II$\underline{\square}$
otal8
prerequisite for EDU 313).

## B. Major in Recreation/Fitness Curriculum Requirements

Students interested in majoring in recreation/fitness should declare it as a major as soon as possible. This will result in assignment to an academic adviser familiar with the current curriculum and with any impending changes that may occur. To receive a bachelor's degree, students must complete the core courses listed below in the recreation/fitness major and the University's general education requirements with an overall gradepoint average of at least 2.50 . Students seeking information about the program should contact the chair of Department of Kinesiology, Health and Education Foundations..

BIO 126 Human Nutrition
BIO 208 Human Anatomy and Physiology I
BIO 208L Anatomy and Physiology I Laboratory ..... 0
BIO 209 Human Anatomy and Physiology II ..... 4
BIO 209L Human Anatomy and Physiology II Laboratory ..... 0
PHE 125 Introduction to Physical Education ..... 3
HEA 135 Safety and First Aid ..... 3
PHE 240 Performance and Analysis of Sport Skills I ..... 2
PHE 241 Performance and Analysis of Sport Skills II ..... 2
PHE 242 Performance and Analysis of Sport Skills III ..... 2
PHE 200 Concepts of Lifetime Fitness ..... 2
PHE 330 Motor Development
PHE 360 Statistics and Measurement in Physical Education ..... 33
PHE 370 Biomechanics ..... 3
PHE 390 Practicum in Physical Education
PHE 391 Practicum in Recreation ..... 3
PHE 392 Practicum in Fitness Assessment ..... 3
PHE 440 Physiology of Exercise ..... 3
PHE 450 Organization and Administration in Physical Education ..... 3
PHE 465 Exercise Prescription ..... 3
PHE 496 Field Experience in Recreation/Fitness ..... 5
PHE 498 Senior Seminar in Recreation/Fitness ..... 1
PHE 500 Adapted Physical Education ..... 3Electives ( 6 semester hours) chosen from the followingor from other approved courses:
PHE 209 Intermediate Aerobics (1)
PHE 318 Advanced Lifesaving (1)
PHE 319 Water Safety Instructor (2)
HSR 110 Activities Therapy (3)
HSR 200 Introduction to Gerontology (3)
HSR 251 Therapeutic Recreation (3)
PHE 260 Principles of Strength (3)
PHE 280 Intro to Athletic Training (3)
Total

## C. Health Education Certification P-12/Health Education/ Health Education Minor

Students who specialize in physical education P-12 are encouraged to also specialize in health education and complete requirements for certification. Students who complete a certification major program in education, or post-bachelor's students with teacher certification in Kentucky, may choose to complete the health education P-12 program and apply for certification. Students wishing to enroll must meet the "Admission Requirements for all Teacher Education Programs" listed at the beginning of the "Education" section of this catalog. Students must also successfully complete the following admission semester courses-EDU 300, 305, 311, 313 and EDS 322 with a $C$ or better and be fully admitted to the teacher education program. Students interested in this program should consult with the chair of Kinesiology, Health and Educational Foundations Department. The following courses must also be completed with a GPA of at least 2.50 and an overall GPA of at least 2.50 . Students who wish to minor in Health without obtaining teaching certification must take only the content courses ( 29 credit hours) listed below, minus HEA 525 and HEA 498.
BIO 208 Human Anatomy and Physiology I ..... 4
BIO 208L Human Anatomy and Physiology I Laboratory ..... 0
BIO 209 Human Anatomy and Physiology II ..... 4
BIO 209L Human Anatomy and Physiology II Laboratory ..... 0
HEA 125 Introduction to Health Education ..... 3
HEA 135 Safety and First Aid ..... 3
HEA 160 Personal Health ..... 3
HEA 170 Community Health ..... 3
PHE 200 Concepts of Lifetime Fitness ..... 2
HEA 320 Drug and Alcohol Education ..... 3

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D. Major in Athletic Training (http://www.nku.edu/~nkuatp)

The mission of the athletic training program (ATP) is to offer a program of excellence that will produce well-rounded and competent entrylevel athletic trainers. The program is designed to provide the tristate with highly qualified National Athletic Trainers' Association Board of Certification (NATABOC) Certified Athletic Trainers (ATC) for positions in orthopedic rehabilitation centers, wellness/fitness centers, high schools, college programs, and professional teams.

The Athletic Trainer is a highly qualified allied health care professional specializing in the health care issues associated with physical activity. In cooperation with physicians and other health care personnel, the athletic trainer functions as an integral member of the health care team in secondary schools, colleges and universities, professional sports programs, sports medicine clinics, and other health care settings. The athletic trainer functions in cooperation with medical personnel, athletic personnel, individuals involved in physical activity, parents, and guardians in the development and coordination of efficient and responsive athletic health care delivery systems.

## Bachelor's of Science in Athletic Training

The Bachelor's of Science in Athletic Training is an allied health degree offered in the Department of Kinesiology, Health and Educational Foundations in the College of Education and Human Services. The degree provides an integrated didactic and clinical education program to prepare students for a career as NATABOC Certified Athletic Trainer (ATC).

The Bachelor's of Science in Athletic Training is a cohort program completed over five consecutive semesters, two summer practicum experiences and a clinical education component. The coursework consists of sixty credit hours designed to provide formal instruction of the NATA educational competencies and clinical proficiencies.

The clinical education component is a series of eight clinical experiences that correspond directly to course content. The course instructors work in cooperation with clinical instructors to supply a guided application of knowledge and skills acquired in the classroom to a practical real-world environment. Clinical education sites represent college athletics, professional sports teams, orthopedic, family practice and rehabilitation settings.

## CAATE Accredited Program Since 2006 (http://caate.net/)

Commission of the Accreditation of Athletic Training Education (CAATE) accredited program. CAATE Accreditation recognizes the NKUATP meets the required standards for the education training of entry level certified athletic trainers.

## Athletic Training Major Coursework

| Course | Hours |
| :--- | :---: |
| ATP 280 Pre-Athletic Training | 1 |
| ATP 296 AThletic Training Clinical I | 2 |
| ATP 300 Equipment Intensive Field Experience Practi- <br> cum | 1 |
| ATP 333 Lower Extremity Evaluation | 3 |
| ATP 334 Upper Extremity Evaluation | 3 |
| ATP 394 Athletic Training Clinical II | 2 |
| ATP 396 Athletic Training Clinical III | 2 |
| ATP 400 General Medical Field Experience Practicum | 1 |
| ATP 420 General Medical for Athletic Training | 3 |
| ATP 425 Therapeutic Modalities | 4 |
| ATP 430 Pharmacology for Athletic Training | 3 |


| Course | Hours |
| :--- | :---: |
| ATP 435 Administration of Athletic Health Care | 3 |
| ATP 440 Rehabilitation of Athletic Injuries | 4 |
| ATP 450 Rehabilitation Field Experience Practicum | 1 |
| ATP 455 Current Issues in Athletic Training | 2 |
| ATP 494 Athletic Training Clinical IV | 2 |
| ATP 496 Athletic Training Clinical V | 2 |
| HEA 135 Safety \& First Aid | 3 |
| PHE 200 Concepts of Lifetime Fitness | 2 |
| PHE 260 Principles of Strength Training | 3 |
| PHE 280 Introduction to Athletic Training | 3 |
| PHE 360 Statistics \& Measurements | 3 |
| PHE 370 Biomechanics | 3 |
| PHE 440 Physiology of Exercise | 3 |
| PHE 465 Exercise Prescription | 3 |
| PSY 405 Counseling | 3 |
| TOTAL | $\mathbf{6 0}$ |

Total number of hours required for degree: 128
Number of hours in general education 53
*14 hours are pre-professional required courses Number of hours in degree program core: 60
Number of hours in general electives 15
*6 hours are pre-professional required course

## Program Requirements

Uniforms: Students are required to purchase uniforms and nametags as designated by the ATP faculty. This uniform is required for all clinical assignments.

Primary Health Insurance: NKU ATP students are required to have a primary health insurance policy throughout their enrollment in the NKU ATP program. Students must provide proof of the policy annually to the NKU athletic training program.

Professional Liability Insurance: For the protection of the student, all ATP students are required to carry malpractice for the duration of enrollment in the program.

Physical Examination: ATP students are required to complete an annual physical examination to ensure their health and physical fitness will allow them to complete the duties required of an athletic trainer.

Hepatitis B Vaccine: Hepatitis B vaccine is required for ATP admission.. The student is responsible for the cost. For information about where to receive the vaccine, please contact Noriko Masamoto, ATO OSHA and Blood Borne Pathogen Coordinator at 859-572-5118.

NATABOC Examination: Students are encouraged to complete the NATABOC examination, but it is not a requirement for graduation.

## Tracks of Study

Athletic Training is an allied health care field that provides a variety of employment settings. The high school setting is among the fastest growing markets. Often positions are difficult to fill because the high schools require athletic trainers to have teaching responsibilities and therefore teacher certification. The ATP and Department of Educational Specialities feel strongly that NKU should provide athletic training students the option to formally pursue teacher certification as a track of study. We feel that this will provide an excellent job opportunity for the students and provide a much needed service to the Northern Kentucky/Greater Cincinnati community.

The program will include three tracks of study for student selection:
I. Athletic Training - 4 year curriculum
II. Athletic Training with content courses required for P-12 certification. Completed in 4 years - apply for MAT Program for PE certificating -2 years

## III. Athletic Training with P-12 Education Certification - 5 years

## Minimum Admission Requirements

- Choose pre-athletic training as major (XATH)
- Must have a least a sophomore rank (30 hours0
-Completion of pre-professional coursework with a minimum grade of C
-Cumulative GPA of 2.5
-Directed clinical observation completed as part of ATP 280 pre-athletic training
-Technical standards for minimum mental and physical function.


## Admission Standards

Any student wishing to apply for admission into Athletic Training Program (ATP) must complete a two-part process.

## Step 1: Pre-professional

Students must choose pre-athletic training (XATH) as their major and successfully complete selected coursework and directed observation. The coursework consists of nine classes for a total of 24 hours. The pre-professional courses are listed below. Students must receive a minimum grade of C for each pre-professional course, and attain a cumulative grade point average (GPA) of 2.5 to be eligible for the next stage of admission.

## Pre-Professional Coursework

| Course | Hours |
| :--- | :--- |
| ATP 280 Pre-athletic Training | 1 |
| PSY 100 Introduction to Psychology | 3 |
| BIO 126 Human Nutrition | 3 |
| HEA 135 Safety \& First Aid | 3 |
| HEA 160 Personal Health | 3 |
| PHE 280 Introduction to Athletic Training | 3 |
| BIO 208 Anatomy \& Physiology I with Lab | 4 |
| BIO 209 Anatomy \& Physiology II with Lab | 4 |

## Directed Observation

XATH students are required to accumulate a minimum of 75 clock hours of directed observation with an ATC at NKU's Athletic Training room or associated clinical sites. The observation will be completed as part of ATP 280 Pre-Athletic Training.

ATC staff evaluate the student's performance during this time. The student is required to receive a minimum of a 2.5 on a 4 -point evaluation scale to be eligible for the next stage of admission. The evaluation form will be made available to students prior to the beginning of observation. For more information or to obtain the evaluation forms, contact Trey Morgan, ATP Coordinator at extension 1399 or online at http://www.nku.edu/ $\sim$ nkuatp/.

## Step 2: Formal Application

Formal program application and admission occur during the fall semester. Once a student is admitted, he/she will begin the program the following spring semester. In order to be eligible for formal application, the student must attain at least a sophomore rank (30 hours) and satisfactory completion of the pre-professional stage. ATP application deadline is October 31 ${ }^{\text {st }}$. The application includes a typed (one-page, double-spaced 10 font) written sample that will address the following: "What do you believe is the most important attribute of an athletic trainer as an allied health car provider and what attributes do you possess that will allow you to fulfill the role of an athletic trainer?"

The student is required to provide transcripts and/or proof of satisfactory completion of the pre-professional stage. Application materials are available by calling Trey Morgan, ATP Coordinator at 859-572-1399 or http://www.nku.edu/~nkuatp/.

## Transfer Students

Transfer students are required to satisfy the same program requirements and admission requirements as NKU students. Except for PHE 280, Introduction to Athletic Training, pre-professional courses may be taken at another institution and credit transferred to NKU if evaluated as equivalent coursework. PHE 280 has a specific course content and an associated clinical assignment that relates directly to ATP educational competencies and must be taken on NKU's main campus unless specified by the NKU athletic training program coordinator.

## Student Selection

The ATP has limited and selective enrollment. The program has a set maximum total student enrollment. Annual available positions will be determined according to the set maximum for program positions and the positions that became available through graduation and attrition.

Students who fulfill the minimum requirements for formal application are chosen by an objective selection criteria based on four parts: cumulative GPA, pre-professional coursework grades, evaluations by supervising ATC's during directed observation, and quality of application. Each portion of the criteria has been weighted according to importance determined by the NKU faculty and staff.

The weighting is as follows:

> 1. $25 \%$ cumulative GPA
> 2. $25 \%$ pre-professional coursework grades
> 3. $35 \%$ observation evaluations
> 4. $15 \%$ application quality.

Each section is given a numerical score to provide the student with an overall score. The overall score is used to objectively rank the students in a descending order. Available positions will be filled from the from the highest ranked applicant down until all positions are filled. Rejected students will be afforded the opportunity to reapply during the next application period. Accepted students begin clinical rotations the spring semester following admission to the ATP.

## Technical Standards

The NKU technical standards represent the mental and physical requirement necessary for a student to successfully participate in and complete the NKU ATP program. The guidelines are designed to reflect the necessary skills identified for the Entry-Level AThletic Trainer as detailed in the NATABOC Role Delineation STudy. A student must meet the requirements for admission, retention, and graduation.

In order to demonstrate compliance, students will have to undergo a physical exam. Any medically related information will be kept in the secure medical files of the NKU athletic department. A copy of the Medical History and Physical Exam Form is available from Trey Morgan, ATP Coordinator extension 1399 or online at http://www.nku.edu/~nkuatp/.

## Contact Us:

Trey Morgan, MS, ATC morgant@nku.edu
Athletic Training Program Coordinator
Northern Kentucky University
109 Albright Health Center, Nunn Drive
Highland Heights, KY 41099
Webpage: http://www.nku.edu/~nkuatp/

## E. Minors

## Minor in Physical Education

The minor in physical education is offered from existing courses as an option for students interested in the field of physical activity.

The courses selected provide an initial level of training appropriate for an academic minor at NKU. The physical education minor does not result in certification to teach physical education in the schools.

Students must achieve an overall GPA of a 2.50 or better; achieve a GPA of at least a 2.50 in physical education courses; and complete the following courses.

PHE 135 Safety and First Aid 3
PHE 330 Motor Development
PHE 360 Statistics and Measurement in Physical Education 3
PHE 440 Physiology of Exercise (prereq BIO 208) 3
PHE 465 Exercise Prescription (prereq PHE 440) $\underline{3}$
Any three of the following courses:
PHE 200 Concepts to Lifetime Fitness (2)
PHE 240 Performance and Analysis of Sport Skills I (2)
PHE 241 Performance and Analysis of Sport Skills II (2)
PHE 242 Performance and Analysis of Sport Skills III (2) Total

## Minor in Sports Medicine (21 semester hours)

The minor in sports medicine provides students with a foundation in athletic health care and sports medicine. Students pursuing professions related to sports medicine who may benefit from the minor course content includes but not limited to: Physical Education, Recreation-Fitness, Coaching, Pre-Physical Therapy, or Pre-Medicine.

Athletic Training Program (ATP) admission is not is not required; however all course prerequisites are strictly enforced.

The minor in sports medicine is 21 hours of coursework. Students must take PHE 280 prior to any other ATP courses. Students may then choose from any of the remaining courses listed below.

Please Note: The sports medicine minor is not a professional program. Students who obtain this minor are not eligible for the National Athletic Trainers' Association Board of Certification (NATABOC) exam and consequently cannot become a Certified Athletic Trainer (ATC). The student must choose 21 semester hours from the coursework below:

| Course | Hours | Offered |
| :---: | :---: | :---: |
| PHE 260 Principles of Strength Training | 3 | Spring/Fall |


| Course | Hours | Offered |
| :--- | :---: | :--- |
| PHE 280 Introduction to Athletic Training * | 3 | Spring/Fall |
| PHE 370 Biomechanics* | 3 | Spring/Fall |
| PHE 440 Exercise Physiology * | 3 | Spring/Fall |
| PHE 465 Exercise Prescription * | 3 | Fall |
| ATP 333 Lower Extremity Evaluation * | 3 | Spring |
| ATP 334 Upper Extremity Evaluation * | 3 | Fall |
| ATP 420 General Medical * | 2 | Fall |
| ATP 425 Therapeutic Modalities * | 4 | Spring |
| ATP 435 Administration of Athletic Health Care | 3 | Fall |
| ATP 440 Rehabilitation of Athletic Injuries * | 4 | Fall |
| ATP 430 Pharmacology for Athletic Training * | 3 | Spring |
| * Course has prerequisites |  |  |

## F. General Activity Courses

The physical education program also offers activity courses at the 100 and 200 level (e.g., tennis, badminton, golf, racquetball, swimming, conditioning) meeting two hours per week and carrying 1 semester hour of credit. Letter grades are based on physical, cognitive, and psychomotor behaviors demonstrated by students. Students furnish activity clothing and, in some cases, athletic equipment, although most of the equipment is provided. Some activity courses are offered at off-campus facilities and an additional fee may be charged to the student. Activity courses are designed to (1) teach those activities that may serve as lifetime sports and recreation during leisure time, (2) offer regulated and supervised activities to improve and maintain physical fitness and sport skills, and (3) develop a positive and intelligent attitude toward the need for and benefits of a physically active lifestyle.

## Certificate Program

Social Justice

## GRADUATE PROGRAMS

(see graduate catalog for additional information)

## ACCREDITATION

Council on Social Work Education

## MISSION

The Counseling, Human Services, and Social Work Department offers programs for a variety of careers in the fields of social work, counseling, and human services. Through classroom education and ongoing community engagement, students integrate knowledge, values, and skills for professional practice. The Department's program actively combine classroom instruction with supervised field experiences. By being involved in community settings as well as campus classrooms and laboratories, students have ongoing opportunities to test their theoretical knowledge and skills in real-world situations and to bring on-the-job experiences back to the classroom for analysis and discussion. All three degree programs have selective admissions policies because of the Department's professional orientation, accreditation standards and the post-graduation licensing requirements faced by many practitioners who wish to work in these fields.

## DEPARTMENT POLICIES

## Grade Requirement

Students majoring in counseling and human services or social work must have a grade of $C$ or better in all courses applied toward the major and a cumulative GPA of 2.5 .

## 138 Northern Kentucky University

## Student Criminal Background Check Policy

Professions represented in the department are charged with providing care and protecting the safety of vulnerable populations including children and the aged. Applicants are required to submit to criminal background checks as identified by the department as a part of the application process for several reasons. First, agencies utilized for clinical placement require students to undergo criminal background checks and may deny clinical access to those convicted of felonies and certain misdemeanors. Second, employment in certain settings and/or licensure may be denied to graduates with certain criminal backgrounds. Advising and direction is available on request.

Conviction of these offenses may result in a student's denial of admission to, or dismissal from, any program within the department. The cost of this and any subsequent screening will be borne by the student. The student is responsible for notifying the department of any change in the status of this record. Note that successful completion of a criminal background check does not insure eligibility for certification, licensure, or future employment.

## SOCIAL WORK

The Bachelor of Social Work (BSW) program instructs students in the fundamental knowledge, values, ethics, and practices for a generalist social work career. The coursework and related field practicums prepare graduates for the many diverse challenges, opportunities, and responsibilities of social work practice. The coursework provides a breadth and depth of knowledge in areas specific to social work including social work practice theory and skills, social work policy and services, human behavior and social environment, and social work research.

The program includes two semesters of field practicum that is an integral and vital component of the curriculum. Numerous community agencies serve as field practicum sites. In addition to the social work-focused courses, the professional curriculum is integrated with the core knowledge provided in the social/behavioral and biological sciences requirements. The program does not give academic credit for life work experience.

Social work practice promotes human well-being by strengthening opportunities, resources, and capacities of people in their environments and by creating policies and services to correct conditions that limit human rights and the quality of life. The social work profession works to eliminate poverty, discrimination, and oppression. The BSW degree offers graduates extensive career mobility within a variety of social work settings and further serves as a foundation for higher degrees in the field.

## Accreditation

The program is accredited by the Council on Social Work Education (CSWE). Graduates are awarded the degree of Bachelor of Social Work (BSW), providing them the eligibility to test for entry-level state licensure.

## Selective Admission Requirements

Students make formal application to the Social Work Program after they have declared social work as a major and prior to commencing the junior social work curriculum. The application includes an application form, an autobiographical critical life review and letter of recommendation. Students submit their application during the semester in which the student meets the following criteria:

1. Achieve sixty (60) semester credit hours with a cumulative gradepoint average (GPA) of at least 2.50;
2. Completion of SWK 105 and SWK 203 with a minimum grade of C.
3. Completion of the program's required supportive courses with a minimum grade of C in all required courses:
4. Demonstration of an interest in, and aptitude for, a career in social work per evaluation of any and all pertinent and available student information.

All required supportive courses must be completed with a minimum grade of C.

BIO 123 Human Ecology or BIO 125 Biological Perspective of Wellness; or, BIO 126 Human Nutrition
ECO 200 Principles of Macroeconomics; or
ECO 201 Principles of Microeconomics; or
ECO 215 Contemporary Economic Issues
STA 110 Introductory Probability, STA 113 Introduction to
Probability and Statistics, or STA 205 Introduction to Statistical Methods
PHI 155 Introduction to Ethics; or, PHI 220 Health Care Ethics 3
PSC 100 American Politics; or PSC 101 State and Local Politics 3
PSY 100 Introduction to Psychology
3
SOC 100 Introductory Sociology 3
SPE 101 Principles of Speech Communication 3

Students may not be admitted or not retained in the social work program based on the following:

1. Academic performance below the acceptable level of an overall GPA of at least 2.00 and/or less than the grade of $C$ in all social work required and supportive required courses.
2. Behavior inappropriate or detrimental in a professional relationship, including criminal convictions.
3. Violation of Northern Kentucky University Student Code of Rights and Responsibilities.
4. Violation of the National Association of Social Workers (NASW) Code of Ethics.

## Bachelor of Social Work

The following required courses in social work

$$
\text { SWK } 105 \text { Community Experience in the Social Services } 3
$$

SWK 203 Social Welfare in Contemporary Society 3
SWK 303 Professional Interactional Skills 3
SWK 304 The Human Experience I: Theoretical Perspectives 3
SWK 305 Social Work Practice: The Generalist Model 3
SWK 307 Human Behavior and Social Environment 5
SWK 308 Social Work Research
SWK 404 Social Work Practice: Individuals, Families, Groups
SWK 405 Social Work Practice: Community Organization
SWK 406 Field Instruction II
SWK 407 Social Welfare Policy
SWK 408 Field Instruction III
Additionally, nine (9) semester hours are required from the social work electives below:

SWK 394 Topics in Social Welfare
SWK 411 Social Work and the Law
SWK 499 Independent Study
SWK 510 Child Abuse
SWK 520 Services to Women
SWK 525 Substance Use and Abuse
SWK 594 Issues in Social Welfare
Total
49

## Area of Concentration

There is no minor in social work. Social work is available as an area of concentration for students who complete four of the 300 level or above courses listed below.

SWK 394 Topics in Social Welfare
SWK 411 Social Work and the Law
SWK 510 Child Abuse
SWK 520 Services to Women
SWK 525 Substance Use and Abuse
SWK 594 Issues in Social Welfare

## Computer Literacy Requirement

Social work students are required to use Windows, Internet, e-mail, electronic library research, and other computer applications throughout the entire social work curriculum.

## Additional Program Information

The program handbook available from the social work office BEP 203 provides more detailed information regarding the curriculum, admission procedures, student organizations, and other aspects of the program. In addition, this handbook details the field practicum component of the program. Field students are required to carry professional liability insurance as indicated in the program handbook.

The program also offers a two-year Public Child Welfare Certification Program (PCWCP) Scholarship that includes tuition and stipend benefits.

An active student social work organization provides support to students and involvement in community service projects.

## COUNSELING AND HUMAN SERVICES

Human services worker is a generic term for people who hold professional and paraprofessional jobs in social services. The bachelor's degree program in counseling and human services is uniquely designed to prepare graduates to assist individuals, families and communities in need of assistance through a multidisciplinary knowledge base, focusing on prevention as well as remediation of problems, and maintaining a commitment to improving the overall quality of life of service populations. Students graduating with a B.S. in Counseling and Human Services are equipped to work in many different service settings integrating and coordinating the efforts of specialized professionals. These settings including group homes and halfway houses; correctional, mental retardation, and community mental health centers; family, child, and youth service agencies, and programs concerned with alcoholism, drug abuse, family violence, aging and other functional specializations.

## Pre-Major and Selective Admission Requirements

Admission to the program is selective. To be considered for admission, applicants must

1. be admitted to Northern Kentucky University;
2. successfully complete HSR 100 Orientation to Mental Health/ Human Services.
3. students need faculty recommendation and consent of instructor before enrolling in any practica.
Persons entering the University with an interest in the human services program will be designated as HSR students for advising purposes.

Students planning careers in preschool/day-care should consult with their academic advisers for assistance in meeting the requirements for appropriate state certification.

## Bachelor of Science in Counseling and Human Services

The bachelor's degree program in counseling and human services consists of 128 total semester hours. Forty-five (45) hours must be upper division level (300) and above. A minor or area of concentration must also be completed. Students have the option of focusing their studies with elective courses tailored to specialty populations and delivery settings.

## Required Human Services Core

HSR 100 Orientation to Mental Health/Human Services
HSR 102 Practicum in Human Service I
HSR 103 Practicum Seminar I
HSR 105 Counseling for Human Services Professions
HSR 110 Activities Therapy
HSR 207 Practicum in Human Services II
HSR 211 Practicum Seminar II
HSR 216 Group Theories and Practice
HSR 300 Contemporary Issues in Mental Health 3
HSR 304 Field Experience in Mental Health I

HSR 305 Assessment and Appraisal in Mental Health 3
HSR 404 Field Experience in Mental Health II 4
HSR 412 Leadership Skills in Group Counseling 3
HSR 416 Mental Health Counseling: Principles and Practices 3
HSR 430 Human Services Administration 3

## Required General Education Courses

BIO 125 Biological Perspectives of Wellness
SOC 100 Introduction to Sociology
PSY 100 Introduction to Psychology

## Supporting Courses

Human Development Elective Choices
PSY 220, PSY 319, PSY 320
PSY 300 Personality Theory
PSY 333 Abnormal Psychology
SWK 308 Social Work Research
PAD 300 Introduction to Public Administration
Elective Human Services Courses (6 hours required)
HSR 212 Crisis Intervention
HSR 226 Behavior Problems of Children
HSR 301 Holistic Approach to Mental Health
HSR 302 Rehabilitation of the Geriatric Patient
HSR 306 Introduction to Gerontology
HSR 314 Death, Dying and Grief
HSR 321 Mental Health and Aging
HSR 340 Alcoholism: Issues and Intervention
HSR 410 Psycho-Social Forces in Late Life
HSR 450 Alcoholism and the Dysfunctional Family
HSR 500 Multicultural Family Work: Principles and Practices
HSR 502 Positive Guidance Strategies for Early Childhood Practitioners

## Area of Concentration in Counseling and Human Services

Counseling and Human Services is available as an area of concentration for students who complete four of the HSR 300 level or above classes listed above.

## Minor in Counseling and Human Services

The minor in counseling and human services is appropriate for students majoring in the behavioral, social, or health sciences. The minor requires successful completion of Orientation to Mental Health/Human Services (HSR 100), and 18 additional semester hours of mental health/ human services courses ( 6 semester hours of which must be numbered 300 or above). Students may choose as part of their mental health/human services course requirement a practicum course and accompanying seminar involving supervised on-the-job work experience in a service delivery agency. For more information on the practicum/seminar courses contact the director of mental health/human services.

## SOCIAL JUSTICE STUDIES

Social Justice is an interdisciplinary area of study that focuses on issues of equity and fairness in the distribution of power, privilege, and resources in human societies. Issues in social justice can include any of the differences that have been used to divide members of society and distribute the basic elements of human existence on an unequal basis. Issues may include, but are not limited to, race, sex, class, ethnicity, gender, identity, ability, and age. Courses not only explore violations of social justice but also examine reactions to these violations and seek out ways to resolve them. For complete information, see "SOCIAL JUSTICE STUDIES" on page 104 of this catalog.

## THE COLLEGE OF INFORMATICS

## DEPARTMENTS

Business Informatics, Communication, Computer Science
Outreach Unit: Infrastructure Management Institute (IMI)

## CONTACTING THE COLLEGE

The main office of the College of Informatics is located in AST 206 and may be reached during business hours by phone at 859-572-5568. Interested persons are invited to browse the college's website at http:// informatics.nku.edu

| Perry, dean | douglas.perry@nku.edu |
| :---: | :---: |
| Teri Slick, assistant dean | @@nku.edu |
| Ms. Sue Murphy, assistant to the dean | murphyl1@nku.edu |
| Ms. Tina Altenhofen, assistant | altenhof@nku.edu |
| Ms. Pamela Wagar, business officer | pam.wagar@nku.edu |
| Mr. Chris Brewer, director of online technology |  |
|  | chris.brewer@nku.edu |
| Mr. James Hughes, master advisor/lecturer hughesja@nku.edu |  |
| Ms. Dorothy Wright, advisor/lecturer |  |
| Ms. Sarah Schroeder, freshman specialist |  |
| Ms. Shanna Osborne, development officer osbornes1@nku.edu |  |
| Mr. Timothy Ferguson, director of infra management institute | astructure fergusont2@nku.edu |
| Dr. Gary Ozanich, director of strategic advancement |  |
|  | hg1@ |

Inquiries about the College of Informatics undergraduate programs and advising questions can be directed to the College of Informatics Advising Center, located in AST 363. You can also reach us by phone at 859-572-7784 or e-mail to informatics@nku.edu.

## PROGRAMS OFFERED BY THE COLLEGE OF INFORMATICS

Bachelor Degrees
Bachelor of Arts
Electronic Media and Broadcasting
Journalism
Media Informatics
Public Relations
Communication Studies

## Bachelor of Science

Business Informatics
Computer Information Technology
Computer Science

## Minors

Business Informatics
Computer Forensics
Computer Information Technology
Computer Science
Electronic Media and Broadcasting
Information Security
Journalism
Popular Culture Studies
Communication Studies

## Post-Baccalaureate Certificates

Information Systems Development

Information Systems Management

## Graduate Programs

(See graduate catalog for additional information)
Master of Arts in Communication
Master of Science in Business Informatics
Master of Science in Computer Science
Master of Science in Health Informatics

## Graduate Certificates

Business Informatics
Enterprise Resource Planning
Health Informatics

## MISSION AND GOALS FOR THE COLLEGE OF INFORMATICS

The mission of the COI at NKU is to create a community of learners and scholars especially prepared to meet the fast-paced integrative changes in the fields of computing, information, and communication. Through its curriculum, research, and outreach programs, COI represents NKU's creative, analytic, and technical response to an economy driven by innovation and convergence. COI will play a proactive leadership role in the transition to a new economy in the region.

COI represents a community of scholars who excel at educating students in the interdisciplinary and disciplinary study of computer science, communication, business informatics, and media. Our educational, research, and outreach activities are informed by the philosophy that computing, communication, and information processes go hand-in-hand.

While the list that follows is not meant to be all inclusive, the COI will develop integrative programs of excellence that feature a variety of cutting-edge topics spanning four major categories:
a. Information and communication infrastructure: integrated voice/ data systems; hardware configuration and maintenance; integrative mass broadcasting systems; mobile technologies; information algorithms and architecture; information security and cryptography; logic and computation; real-time embedded systems; network design and telecommunications.
b. Information and communication design: software engineering; intelligent systems; database design; enterprise systems development; news writing and technical documentation; scientific visualization; web development and publishing; human-computer interaction and communication; animation; computer graphics; knowledge representation; usability and content issues; multimedia product design; entertainment; media production.
c. Information and communication management: organizational intelligence; e-commerce; global technology management; journalism and content management; ethics and mass media; health informatics; technology-focused business models; IT project management; public relations; organizational communication; work flow and process analysis; IT innovation; information policy and communication law; human communication.
d. Information and communication analysis: data warehousing; knowledge-based analysis and business intelligence; computerassisted reporting and dissemination; bioinformatics and neuroinformatics; decision theory; information, media and communication theory; communication paradigms; cognitive science; social-cultural, legal, and ethical analysis; social network analysis; strategic
technology analysis; media criticism and literacy; rational discourse.
The College also includes an outreach unit, the Infrastructure Management Institute (IMI). The Infrastructure Management Institute will promote collaboration among all of the constituent departments and will assist in establishing the high visibility for the programs that is necessary for creativity and growth. The Institute will provide a smooth entry point for the private sector to access the entire range of intellectual and physical resources available at Northern Kentucky University in the area of information science.

## COLLEGE-WIDE PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

See individual department sections for specific admission requirements.

## COLLEGE-WIDE GRADUATION REQUIREMENTS

See individual departments section for specific admission requirements.

## UNDECLARED STUDENTS—INFORMATICS

Teri Slick, Assistant Dean 859-572-7784<br>teri.slick@nku.edu

Students who are interested in one or more of the academic units within the College of Informatics can choose to be "Informatics Undeclared" until they decide on a specific major. For example, if a student is interested in Communication, but is not sure which particular area to choose, she/he can select the major code of "INF UNDB." The collegespecific, undeclared major codes allow students to receive more accessible and personalized academic advising from an individual who is familiar with the College's programs and admission requirements.

## Business Informatics

## Department

## FACULTY

Dr. W. Benjamin Martz, chair
Frank W. Braun, Teuta Cata, Sudesh M. Duggal, Kevin Gallagher, Jerome Gonnella, Gary Hackbarth, James Hughes, David J. Manning, Vijay V. Raghavan, Toru Sakaguchi, Gary Scott, Xiaoni Zhang

## CONTACTING THE DEPARTMENT

The Business Informatics Department is located in AST 368 and may be reached during business hours by phone at 859-572-6366. Visit the department's website at http://informatics.nku.edu/bis.

Dr. W. Benjamin Martz, chair ben.martz@nku.edu
Mr. James Hughes, master advisor, lecturer
jim.hughs@nku.edu

## PROGRAMS OFFERED

Bachelor of Science
Business Informatics
Minor
Business Informatics
Graduate
Master of Science in Business Informatics
Master of Science in Health Informatics

## Undergraduate Certificate

Certificate in Business Informatics
Post-Baccalaureate Certificates
Information Systems Development
Information Systems Management
Graduate Certificates
Business Informatics
Enterprise Resource Planning
Health Informatics

## GENERAL EDUCATION COURSES OFFERED

None

## BACHELOR'S DEGREE PROGRAMS

## Bachelor of Science in Business Informatics

The major in Business Informatics prepares students for careers in business computing, including work as applications programmers, programmer/analysts, systems analysts, systems designers, database and data communication specialists, computer consultants and other professionallevel occupations involving analysis, design, development, and management of computer-based information systems. The program combines technical skills, analytical techniques, business knowledge, and a systems perspective for integrating the computer within transaction processing, management information, and decision-support systems. In this sense, the term "business computing" is broadly defined to include work in business and industrial firms, government institutions, educational organizations, health-care facilities, and other production and service organizations using computers to do the operational and administrative work of the company.

## Pre-major and Selective Admissions Requirements

Students desiring to major in Business Informatics must meet selective admissions requirements for the Department of Business Informatics. Some of the selective admissions courses may fulfill requirements in several mandatory categories: general studies requirements, requirements for the major in Business Informatics and requirements for the minor in business administration.

The selective admissions requirements for the major in Business Informatics can be met by completing the following courses with a minimum grade-point average of 2.50 in these 10 courses:

Selective Admission-Courses
ENG 101 College Writing
MAT 114 Finite Mathematics
CMST 101 Principles of Speech Communication
ACC 200 Principles of Accounting II
ACC 201 Principles of Accounting II
BUS 230 Legal Environment
ECO 200 Principles of Macroeconomics
ECO 201 Principles of Microeconomics
ENG 291 Advanced Writing
STA 212 Statistics for Business Applications I
Additional requirements for the B.S. in Business Informatics:
INF 110 Business Programming
INF 282 Introduction to Databases
INF 284 Introduction to Networks and Data Communication
INF 286 Introduction to Web Development
MAT 109 Algebra for College Students (or ACT 23 or higher)
STA 213 Statistics for Business Applications II or MAT 112 or BIS 380

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BUS 330 Ethics in Managerial Decision-Making
ECO 305 International Context for Business
BIS 305 Advanced Business Programming or INF 260 Object-Oriented Programming I
BIS 310 Structured Analysis and Design
BIS 330 IT Project Management
MGT 300 Behavior in Organizations
BIS 485 Strategic Information Systems Management (Capstone)
MGT 490 Business Policy
Students must also take three electives chosen from the following courses:

BIS 380 Quantitative Analysis with Excel
BIS 382 Information Security and Controls
BIS 402 Programming for E-Commerce
BIS 410 Advanced Analysis and Design
BIS 420 Knowledge Management and Enterprise Applications
BIS 430 Workflow Design and Management
BIS 435 Database Management Systems
BIS 440 Global Information Technology Management
BIS 494 Topics in Business Informatics
The B.S. in Business Informatics also requires completion of the minor in Business Administration. This minor includes courses previously listed and the following four courses:

FIN 305 Principles of Finance
BIS 300 Management Information Systems
MGT 305 Operations Management
MKT 305 Principles of Marketing

## Additional Requirements

Business Informatics majors must also meet the requirements listed in the College of Business section entitled "College-Wide Requirements."

## Transfer Students

Transfer students must complete at least $50 \%$ of the courses required for the major and at least $50 \%$ of the major discipline courses at Northern Kentucky University. For evaluation of transferred courses to meet this requirement and the requirement for 64 semester hours of non-business courses, transfer students should make an advising appointment with the Business Informatics Department in AST 368 at 859-572-6366 as soon as transcripts from previous institutions are available.

## MINOR

## The Minor in Business Informatics

For a minor in Business Informatics, students must complete the following courses:

INF 110 Business Programming
INF 282 Introduction to Databases or
INF 284 Introduction to Networks and Data Communication or
INF 286 Introduction to Web Development
BIS 300 Management Information Systems (prerequisite STA 205 or STA 212)
Additionally, they must choose three courses from the following:
BIS 305 Advanced Business Programming
BIS 310 Structured Analysis and Design
BIS 330 IT Project Management
BIS 380 Quantitative Analysis with Excel
BIS 382 Principles of Information Security
BIS 402 Programming for E-Commerce
BIS 410 Advanced Analysis and Design
BIS 420 Knowledge Management and Enterprise Applications
BIS 430 Workflow Design and Management
BIS 435 Database Management Systems
BIS 440 Global Information Technology Management
BIS 494 Topics in Business Informatics

## CERTIFICATE

Certificate in Business Informatics
INF 110 Business Programming
INF 282 Introduction to Databases
BIS 300 Management Information Systems
BIS 330 Project Management

## POST-BACCALAUREATE CERTIFICATES

The Department of Business Informatics also offers two post-baccalaureate certificate programs. The first requires completion of six threecredit hour courses pertaining to Information Systems Development. The second involves completion of four three-credit hour courses pertaining to Information Systems Management.

Any student with a prior undergraduate degree is eligible for these certificate programs. Most students with an undergraduate degree in a business discipline will only need the courses listed below under the specific certificate program. For students with non-business undergraduate degrees, more courses may be needed to complete prerequisites that are typically courses in an undergraduate business program. These certificates are designed to be completed in 3-4 semesters of part-time study for students with an undergraduate business degree. Students with non-business undergraduate degrees should consult with an advisor for information about additional prerequisite courses and approximate length of time to complete the program.

## Information Systems Development - 18 credit hours <br> INF 110 Business Programming <br> INF 282 Introduction to Databases <br> INF 284 Introduction to Networks and Data Communication BIS 305 Advanced Business Programming <br> BIS 310 Structured Analysis \& Design BIS 402 Programming for E-Commerce

## Information Systems Management - $\mathbf{1 5}$ credit hours <br> INF 110 Business Programming BIS 300 Management Information Systems BIS 330 IT Project Management BIS 440 Global Information Technology Management BIS 485 Strategic Information Systems Management

All coursework must be taken for a letter grade and must be completed within eight years.

## Communication

## Department

## FACULTY

Dr. Cady Short-Thompson, chair
Wes R. Akers, Stephen D. Boyd, Mary Carmen Cupito, Gregory G. DeBlasio, Anthony Deiter, Zachary Hart, Brad King, Yasue Kuwahara, Andrea N. Lambert, Jacqueline S. McNally, Jimmie Manning, J. Patrick Moynahan, Robert W. Mullen (emeritus), Denis Mueller, Russell F. Proctor II, James Gaut Ragsdale, Vicki Abney Ragsdale, Bradford W. Scharlott, Cady Short-Thompson, Karen P. Slawter, Christopher L. Strobel, Penelope B. Summers, Ann M. Taylor, David S. Thomson, Leesha Thrower, Michael L. Turney, Steven M. Weiss, Stephen Yungbluth.

## CONTACTING THE DEPARTMENT

The Department of Communication is located in LA 134 and ST 392 and may be reached during business hours by phone at 859-572-5435. Visit the department's website at http://www.nku.edu/~communicate.

Cady Short-Thompson, chair shortthompson@nku.edu@nku.edu Sarah Schroeder, freshman specialist schroedersar@nku.edu Mark Miller, advisor mark.miller@nku.edu

## PROGRAMS OFFERED

## Bachelor of Arts

Communication Studies
Electronic Media and Broadcasting
Journalism
Media Informatics
Public Relations

## Minors

Communication Studies
Electronic Media and Broadcasting
Journalism
Popular Culture Studies

## Master of Arts in Communication

GENERAL EDUCATION COURSES OFFERED<br>EMB 100 Media Literacy<br>EMB 105 Race, Gender, and the Mass Media<br>POP 205 Introduction to Popular Culture and the Mass Media<br>POP 345 Japanese Popular Culture<br>CMST 101 Principles of Speech Communication

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

See Communication Studies
See Journalism

## COMMUNICATION DEPARTMENT

The faculty of the Department of Communication fosters an integrated approach to the study and practice of communication and emphasizes the fundamental role that communication plays in virtually all human endeavors. With offerings that encompass communication studies/ journalism, media informatics, public relations, electronic media and broadcasting, and communication studies, the department stresses an academic and applied focus among the various communication specialties.

Communication courses offer students basic and advanced skills in written, spoken, and digital and computer mediated communication. They also promote an understanding of the principles and theories of interper-
sonal and mass communication as well as an awareness of the personal, social, psychological, and cultural impacts of communication. Whatever their specific focus-news writing, public speaking, communication law, criticism, production, or communication theory-the department's courses emphasize situational analysis, issue identification, problem-solving, message construction, and effective presentation.

The Department of Communication offers majors in journalism, public relations, electronic media and broadcasting, and communication studies for students who aspire to careers as professional communicators in fields such as newspaper journalism, magazine publishing, audio and video production, broadcast news, advertising and public relations, educational media and organizational communication. Minors are offered in journalism, media informatics, electronic media and broadcasting, communication studies, and popular culture. The department also offers students a wide range of courses that enhance their communicative abilities and support their interests and studies in other disciplines.

The major in public relations offers students a program of interdisciplinary study leading to career opportunities in public relations. The major has an academic and applied orientation and consequently students learn principles and engage in practices that prepare them for entry-level positions in public relations.

The major in journalism is for students interested in writing for newspapers, magazines, and electronic media. It offers a broad base of coursework designed to convey an understanding of the total mass media system coupled with an area of specialization.

The major in media informatics provides students with opportunities to learn and experience the world of new media. This interdisciplinary program explores digital and graphic technologies, computer-mediated communication, animation and the convergence of emerging and legacy media.

The major in electronic media and broadcasting provides a solid foundation for students interested in a career in broadcasting or electronic media production. This discipline encompasses performance, audio production, single-and multiple-camera video production, scriptwriter, sales, advertising, promotion, and management. The major also serves as a springboard for graduate study in several mass communication fields.

The major in communication studies provides a firm foundation for careers or graduate study in many fields. Among the most popular are public relations, sales, organizational communication, law, and training and development/human resources.

## Minimum ACT/SAT/COMPASS English test score requirement:

The level of writing required for many of the courses within the department dictates that certain minimum standardized scores in English be attained PRIOR to taking certain requisite courses within our majors. Please refer to the descriptions of each major for more details. It is the student's responsibility to be aware of these minimum requirements PRIOR to pursuing their course of study. Students do have the option to re-take the residual English portions of these tests to achieve the necessary scores.

## COMMUNICATION STUDIES

The communication studies program provides (1) a strong general background in practice, theory, history, and criticism of communicative acts; (2) opportunities for students to improve their communication skills; (3) a variety of courses to enrich the programs of students in other disciplines; (4) training for students who plan to enter professional fields such as public relations, human resources, sales, training/development, law, ministry, teaching, business, and politics; and (5) a background for graduate study in communication studies or related fields.

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## PRE-MAJOR REQUIREMENT FOR COMMUNICATION STUDIES

Prospective majors must complete the following to be admitted to the major.

- 45 credit hours of study
- CMST 101 Principles of Speech Communication
- CMST 220 Interpersonal Communication with a $C$ or better
-'Cumulative GPA of 2.50 or higher at time of admission to major
These requirements must be met prior to completing 75 hours of study.


## The Major in Communication Studies

Students majoring in communication studies must satisfactorily complete 39 credit hours of study as outlined below, must earn a grade of $C$ or better in each of these 39 semester hours of study, and must take CMST 101 as part of their general education requirements.

1. Core courses

| CMST 220 Interpersonal Communication | 3 |
| :--- | :--- |
| CMST 230 Small Group Communication | 3 |
| CMST 303 Organizational Communication | 3 |
| CMST 340 Strategies of Persuasion or |  |
| CMST 310 Argumentation |  |
| CMST 370 Advanced Public Speaking | 3 |
| CMST 390 Cross-Cultural Communication |  |
| CMST 430 Communication Theories or <br> CMST 410 Rhetorical Theories <br> $\quad$ Total Core | 3 |
| $\quad$ | $\underline{3}$ |

2. Elective Courses ( 12 semester hours)

Students majoring in communication studies must take 12 semester hours of elective courses selected in consultation with their adviser. Up to six of these semester hours may be taken in JOU, PRE, and/or EMB courses; otherwise, all elective credit must be in CMST courses. Courses taken for general education credit may not be used as elective courses for the major.
3. Writing Course ( 3 semester hours)

One writing-intensive course must be taken from the list below. Other writing-intensive courses may be substituted if approved by the CMST faculty. Students may not use the writing course for the CMST major to complete requirements for their minor, area of concentration, or second major. Prerequisites may be required for some of these courses; please consult catalog.

| ENG 340 Business Writing | 3 |
| :--- | :--- |
| ENG 331 Persuasive Writing | 3 |
| JOU 220 Newswriting I | 3 |
| OST 311 Written Communication Systems | 3 |
| EMB 260 Writing for the Media | 3 |

4. Computer Course (3 semester hours)

One computer-intensive course must be taken from the list below.
Other computer-intensive courses may be substituted if approved by the communication studies faculty. Students may not use the computer course for the CMST major to complete requirements for their minor, area of concentration, or second major. Prerequisites may be required for some of these courses; please consult catalog.
INF 101 Computer Literacy and Informatics 3
JOU 321 Publication Skills 4
OST 325 Electronic Publishing/Presentation Technologies 3
Total - CMST Major

## The Minor in Communication Studies

CMST minors must earn a grade of $C$ or better in 21 semester hours of study in CMST courses, including CMST 220 (Interpersonal

Communication). CMST minors must take CMST 101 as part of their general education requirements.

## ELECTRONIC MEDIA AND BROADCASTING

The electronic media and broadcasting program is designed to provide a background in the theory and creation of electronic media that prepares students for careers in the many opportunities in media communication or for graduate studies. The program offers a variety of courses that will develop the necessary skills and knowledge to succeed in the rapidly changing field of communicating through the various avenues of electronic media - from broadcast journalism to live sports production to studio newscasts to documentary production to digital cinema and more

## Program Requirements

The requirement for an electronic media and broadcasting major consists of fifteen hours in the EMB core courses and thirty-three hours of courses listed in one of the two sequences: electronic media or broadcast journalism.

To be considered for graduation, students must complete a full minor in consultation with their major advisor. Students in the Broadcast Journalism sequence must choose a minor other than Journalism, as that sequence encompasses the JOU minor as part of the major.

Students must receive a $C$ or better in all courses which apply to the EMB major and must also have an ACT English score of 20 or higher (or the equivalent on a comparable test) before enrolling in either of the required basic writing courses, EMB 260 or 265.

## Core Courses (15 hours)

EMB/JOU 100 Media Literacy 3
EMB 110 Introduction to Mass Media 3
EMB 140 Introduction to Media Aesthetics 3
EMB 260/265 Basic Media Writing/Newscasting 3
EMB 396/397 Internship or Practicum 3
Electronic Media Sequence (33 hours)
Conceptual/Studies (Choose 2)
EMB 400 Media Criticism 3
EMB /CMST 430 Communication Theories 3
CMST 220 Interpersonal Communication 3
CMST 303 Organizational Communication 3
PSY 304 Consumer Psychology 3
Practical (Choose 2)
EMB 210 Single Camera Production 3
EMB 215 Audio Production 3
EMB 305 Multiple Camera Production 3
EMB 230 Media Announcing 3
MIN 240 Integrated Media Production 3
Business/Law/Ethics (Choose 2)
EMB 307 Media Programming 3
EMB 313 Media Sales, Advertising \& Promotion 3
EMB 460 Project Management 3
JOU 385 Law of Mass Communication 3
JOU 440 Ethics and the Media 3

## Elective Requirements(15 hours total)

9 upper-division hours from Electronic Media and Broadcasting, Popular Culture or Media Informatics
6 additional hours from any discipline in the College of Informatics (may include courses from EMB)

## Broadcast Journalism Sequence (33 hours) <br> Conceptual/Studies (Choose 2) <br> EMB 400 Media Criticism

| EMB/CMST 430 Communication Theories | 3 |
| :--- | ---: |
| CMST 220 Interpersonal Communication | 3 |
| CMST 303 Organizational Communication | 3 |
| PSY 304 Consumer Psychology | 3 |
|  |  |
| Practical (Choose 2) | 3 |
| EMB 210 Single Camera Production | 3 |
| EMB 215 Audio Production | 3 |
| EMB 305 Multiple Camera Production | 3 |
| EMB 230 Media Announcing | 3 |
| MIN 240 Integrated Media Production |  |
|  |  |
| Writing (All 3 required) | 3 |
| EMB 361 Advanced Newswriting | 3 |
| JOU 220 Newswriting I | 3 |
| JOU 230 Newswriting II |  |
|  | 3 |
| Law and Ethics (both required) | 3 |
| JOU 385 Law of Mass Communication |  |
| JOU 440 Ethics and the Media |  |

## Elective Requirements (6 hours total)

6 upper-division hours from Electronic Media and Broadcasting or Journalism

## The Minor in Electronic Media and Broadcasting

Students who wish to earn a minor in EMB must arrange specific details of the requirements with an EMB faculty advisor.

The requirements for a minor in EMB are:
EMB100 Media Literacy (or JOU 100) 3
EMB 110 Introduction to Mass Media 3
EMB 210 Introduction to Video: Single Camera Production 3
EMB 215 Introduction to Audio Production 3
Electives - four EMB electives chosen in consultation with EMB advisor
Total Hours Required
*Students must receive a $C$ or better in any EMB courses taken to fulfill the requirements of the minor.

Note: Elective courses may only be used to satisfy one major/minor requirement, but may be used for two required elements. For example, a major in EMB with a minor in Communication Studies may use CMST 220 for both the major and the minor as the course is required for each. However, EMB/CMST 430 may only be used for the EMB major as it is not a required element of the Communication Studies minor, and POP 205 may be used for both the EMB major and for general education.

## JOURNALISM

The journalism major is designed to provide students with fundamental skills and legal and ethical backgrounds in journalism and related fields.

## Program Requirements

- Students must have an ACT English score or an ACT composite score of 20 or higher (or the equivalent on a comparable test) before they may enroll in JOU 220 Newswriting I, which is a required course.
- To graduate, students must have either a grade-point of 2.5 or higher in courses required for the major or no grade lower than a $C$ in any course required for the major.
- Students majoring in journalism may not receive credit for more than 45 semester hours in JOU courses or their cross-listed equivalents. They must satisfy the oral communication requirement of general education by taking CMST 101.


## Bachelor of Arts in Journalism

Requirements for the major in Journalism are:
JOU 110/EMB 110 Introduction to Media
JOU 220 Newswriting I
JOU 230 Newswriting II 3
JOU 296 Practicum 1
JOU 321 Publication Skills 4
JOU 346 Editing and Layout 4
JOU 385 Law of Mass Communication 3
JOU 396 Internship or JOU 297 Advanced Practicum 1-3
JOU 440 Ethics and Media 3
JOU 492 Mass Media Research Methods 3
Plus three elective courses at the 300 -level or above from the Communication Department.
Total
*The total hours for JOU 296, JOU 297, JOU 396 must be at least 3 but may not exceed 6 .

## The Minor in Journalism

Requirements for the minor in journalism are:
JOU110/EMB 110 Introduction to Mass Media
JOU 220 Newswriting I
JOU 230 Newswriting II
JOU 385 Law of Mass Communication 3
JOU 440 Ethics and the Media
Plus two elective Journalism courses at the 300-level or above, for a total of 21 hours for the minor.
*Students must have either a grade-point average of at least 2.5 in the journalism minor or no grade lower than a $C$ in any course required for the minor.

## MEDIA INFORMATICS

The major in media informatics has an interdisciplinary orientation and draws upon faculty and classes throughout the College of Informatics. It is placed in the Communication Department because of the major's emphasis on the creation of content for distribution in existing, converging, and emerging media channels. This creation process consists of the interplay of video, audio, and text leading to the production of content for media outlets, especially new and converged media outlets. Students majoring in Media Informatics will acquire a skill set that is applicable for content creation across media channels.

Requirements for a major in Media Informatics are:
INF 110 Business Programming or
INF 120 Elementary Programming
INF 186 Elementary Web Design or
INF 286 Introduction to Web Development 3
EMB 140 Introduction to Media Aesthetics 3
MIN 240 Introduction to Integrated Media 3
PHI 210 Ethics of Information Technology 3
ART 221 Web Design for Non-Majors 3
INF 284 Introduction to Networks \& Data Communication 3
CMST 303 Organizational Communication 3
BIS 330 Project Management
MIN 352 Writing for Digital Media
MIN 496 Senior Practicum: Media Informatics
-
Students are required to take 12 hours in elective courses. In consultation with an advisor, electives may be grouped into three general categories - programming and databases, multimedia, and applications. The program provides these recommended groupings of electives, but students have the alternative of developing an individualized program. Students may not count elective courses toward the minor degree requirement.

Electives:
INF 260/260L Object Oriented Programming I
INF 345 Wireless Commerce Technology ..... 3
INF 444 Social Informatics ..... 3
CSC 301 Web Programming ..... 3
EMB 210 Single Camera Production ..... 3
EMB 215 Audio Production ..... 3
EMB 422 Digital Editing ..... 3
MIN 340 Advanced Integrated Media ..... 3
MIN 396 Professional Internship: MIN ..... 1-3
MIN 481 Design of Immersive Experiences ..... 3
JOU 321 Publication Skills ..... 4
JOU 325 Photo Journalism ..... 3
JOU 374 Digital Age Advertising ..... 3
PRE 410 Electronic Public Relations ..... 3
ART 331 Digital Design ..... 3

## PUBLIC RELATIONS

This degree offers students a program of interdisciplinary study leading to career opportunities in public relations. The major has an academic and applied orientation, and, consequently, students learn principles and engage in practices that prepare them for entry-level positions in public relations.

Students must have an ACT English score or an ACT composite score of $\mathbf{2 0}$ or higher (or the equivalent on a comparable test) before they may enroll in JOU 220 Newswriting I or EMB 265 Broadcast News Writing, which is a requirement for the program.

## The Major in Public Relations

JOU 110/EMB 110 Introduction to Mass Media 3
JOU 220 Newswriting I
or EMB 265 Broadcast News Writing
CMST 220 Interpersonal Communication
MGT 205 Introduction to Business and Management or CMST 303 Organizational Communication 3

PRE 375 Principles of Public Relations
JOU 385 Law of Mass Communication 3

MKT 305 Principles of Marketing or EMB 313 Media Sales and Advertising
CMST 340 Strategies of Persuasion or JOU 370 Advertising3
PRE 376 Public Relations Writing ..... 3
or JOU 371 Advertising Copy Writing ..... 3
or JOU 346 Copy Editing and Layout ..... 4
JOU 321 Publication Skills ..... 4
or PRE 410 Electronic Public Relations ..... 3
or CMST 370 Advanced Public Speaking ..... 3
JOU 492 Mass Communication Research Methods ..... 3
PRE 377 Public Relations Case Studies and Campaigns ..... 3
One course from:
Applied Experiential Credit via a
PRE 396 Public Relations Internship or ..... 3
PRE 499 Independent Study: Public Relations or ..... 3
PRE 296 Public Relations Practicum ..... $\underline{3}$
Total ..... 39-40

## POPULAR CULTURE STUDIES MINOR

Offered by the Department of Communication, the minor in Popular Culture Studies offers students an opportunity to explore their cultural environment by examining aspects of cultural artifacts and events and relating them to their specific interests. The interdisciplinary program seeks to broaden the base of a student's college education by using the courses of several disciplines to provide a wide, comprehensive approach to knowledge. The program is designed to equip the student with tools to analyze the world from the standpoint of popular culture. Students will gain familiarity with such concepts as the meaning of beliefs and the significance of icons, heroes, rituals, stereotypes, popular art, and relate those ideas to specific topical interests of their choice.

The program consists of 21 credit hours, including specific popular culture courses and courses taken from the various departments of the university. In consultation with an advisor, students will identify a particular topic of concentration or theme and then select courses from a variety of course offerings. The courses chosen must relate to a particular topic or theme. Twelve (12) of these hours are required courses: POP 205, JOU/ EMB 100, ENG 365, and POP 499. The required courses will assist students in understanding the differences as well as the fluid relationships between folk, popular, and elite culture. All students must complete the required introductory course (POP 205), which introduces them to the field of popular culture studies, including its major areas. Since the mass media are the chief disseminators of popular culture, students are required to take EMB/JOU 100, which examines the roles of functions of mass media in today's society. Students then must take either American Folklore (ENG 365) or History and Film (HIS 380), depending on their interests. An additional 9 semester hours of elective courses are chosen by the student and advisor based on the student's topic of concentration. To finish the required coursework for the minor, all students must complete an independent study (POP 499), which gives them the chance to read and discuss topics of interest and which will culminate their coursework as a capstone experience.

Due to the unusual nature of the program, the student-advisor relationship is very important. Only through careful consultation can an individual program be worked out which will satisfy the needs of the student and at the same time meet the requirements of the program. Students interested in the minor must meet the program director prior to declaring the minor in order to discuss their interest and establish their individual programs and rationale for course selection.

## Popular Culture Studies Minor Program Requirements

 (21 credit hours are required)Required Courses (12 credit hours)
POP 205 Introduction to Popular Culture EMB/JOU 100 Media Literacy ENG 365 American Folklore or HIS 380 History and Film POP 499 Independent Study in Popular Culture

Electives (9 credit hours *)
Take one course from at least two of the following five categories *credit hours must be taken at 300-level and above

American Culture and Society ENG 353 Contemporary American Novel ENG 370 Focus on United States Civilization HIS 314 Rise of the Industrial United State, 1865-1990
HIS 315 Modern United States History, 1900-1939
HIS 316 Modern United States History Since 1939
HIS 454 Early American Frontier
HIS 455 Later American Frontier
EDU 316 Racism and Sexism in Educational Institutions
JOU 421 History of Mass Communication or
EMB 311 History of Broadcasting
JOU 440 Ethics Issues and Media
JUS 101 Introduction to Criminal Justice
JUS 231 Race, Gender and the Law
PSC 319 Presidential Elections
PSC 320 American Politics in Film
EMB 105 Race, Gender, and the Mass Media
SOC 307 Social Stratification
SOC 364 Women and Men in Society
Subgroups (Regional Cultures/Diversity/Ethnic Groups) in America AFR 100 Introduction to Afro-American Studies
ANT 231 Modern American Indians
ANT 273 Race, Gender \& Culture
ENG 210 Survey of African American Literature

ENG 305 American Women Writers
ENG 354 Southern Women Writers
ENG 355 Women’s Autobiographical Writing
ENG 367 Topics in African American Literature
GEO 302 Cultural Geography
GEO 309 Historical Geography of the United States
HIS 317 History of the New South
HIS 431 Historical Themes in African-American History
HIS 444 History of Women in the United States to 1900
HIS 445 History of Women in the United States since 1900
HIS 541 History of Kentucky
PSC 328 State and Urban Problems
PSY 201 Psychology of Race and Gender or
PSY 308 Psychology of Gender
SOC 250 Women in Society or
WMS 150 Introduction to Women's Studies
SOC 300 Race and Ethnic Relations
SPI 311 Spanish-American Culture and Civilization
WMS 310 Women, Wages, and Work

## International Perspective

ANT 240 Peoples of Africa
ANT 245 Peoples of Latin America
ANT 310 African Art
ANT 360 Indians of Mexico and Guatemala
ANT 362 Japanese Culture and Society
ARTH 360 African American Art
ECO 344 Comparative Economic Systems
FRE 310 French Culture and Society Today
FRE 311 French Cultural History
GER 310 Contemporary German Life
GER 311 German Cultural History
HIS 325 Early Latin American History
HIS 326 Recent Latin American History
HIS 329 History of the Middle East
HIS 413 History of Nazi Germany
HIS 473 Battles and Behavior I
HIS 474 Battles and Behavior II
HIS 565 Vietnam War
MUS 106 Music of World Cultures
POP 345 Japanese Popular Culture
SOC 301World Patterns or Race and Ethnicity
CMST 355 Cross-Cultural Communication
SPI 310 Spanish Culture and Civilization

## Traditional Arts and Humanities

ART 102 Survey of Western Art II
ART 103 Survey of Western Art III
ART 321 History of Design
ARTP 290 Basic Photography
DAN 427 Dance History

ENG 202 Survey of British Literature I
ENG 203 Survey of British Literature II
ENG 208 Survey of American Literature I
ENG 209 Survey of American Literature II
ENG 215 Greek and Roman Mythology
ENG 266 Folklore and Literature
ENG 302 Literature and Film
ENG 315 The Bible as Literature
ENG 386 Children's Literature
HIS 421 Cultural and Intellectual History of the U.S. to 1865
MUS 110 Appreciation of Jazz
EMB 380 Documentary Theory and History
EMB 400 Media Criticism
TAR 455 Musical Theater Literature II
Social and Behavioral Sciences
ANT 275 Language and Culture
ANT 320 Religion and Culture
ANT 358 Anthropology and the Arts
ECO 320 History of Economic Though
HSR 314 Death, Dying, and Grief
JOU 370 Principles of Advertising or
MKT 308 Advertising and Promotion
PRE 375 Principles of Public Relations
MKT 320 Consumer Behavior or
PSY 304 Consumer Psychology
PSY 205 Psychology of Human Sexuality
PSY 340 Social Psychology or
SOC 303 Social Psychology
PSY 345 Human Factors Psychology or
PSY 348 Environmental Psychology
SOC 205 Current Social Issues
SOC 213 Sociology of Aging
SOC 308 Social Organization
SOC 315 Marriage and the Family
SOC 369 Sex Crimes
SOC 400 Urban Society
*Topics courses, i.e., ENG 351 Nineteenth Century American Literature, ENG 397 Special Topics in American Literature, MKT 394: Topics: Marketing Issues, POP 394 Special Topics in Popular Culture and SOC 300 Topics in Sociology, may be taken and applied toward the minor upon prior approval of the program director.
*Students who wish to substitute a course not listed above for an elective course must obtain prior approval of the program director.
*Students cannot count the courses required for their majors as the elective courses for the minor.
*To satisfy the requirements for a minor in Popular Culture Studies, students must maintain a grade-point average (GPA) of 2.00 or better and earn at least a $C$ in required courses.

## Computer Science

## Department

## FACULTY

Gary Newell, chair
Maureen Doyle, Richard K. Fox, Charles E. Frank, Yi Hu, Kevin G. Kirby, Douglas G. Perry, Marius Truta, James Walden, Hongmei Wang, Jeff Ward, Gail W. Wells, Dorothy Wright

## CONTACTING THE DEPARTMENT

The Department of Computer Science is located in AST 375 and may be reached during business hours by phone at 859-572-6930. Visit the department's website at http://cs.nku.edu for updates on information.

$$
\begin{array}{ll}
\text { Dr. Gary Newell, chair } & \text { newellg@nku.edu } \\
\text { Dorothy Wright, advisor/lecturer } & \text { wrightd4@nku.edu }
\end{array}
$$

## PROGRAMS OFFERED

## Bachelor of Science

Computer Information Technology
Computer Science

## Minors

Computer Forensics
Computer Information Technology
Computer Science
Information Security

## Master of Science

Master of Science in Computer Science

## Master's Level Certificate

Secure Software Engineering

## GENERAL EDUCATION COURSES OFFERED None

## PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

Students who plan to begin a major or minor in Computer Science will need a background in mathematics equivalent to four years of high school work: Algebra I and II, geometry, and pre-calculus. Students who plan to begin a major or minor in Computer Information Technology will need a background in mathematics equivalent to Algebra I and II. In all cases, the student should have earned a grade of B or better in high school mathematics courses for them to be considered as part of the student's background.

Students who enter NKU without sufficient mathematics background can do the required preparation by successfully completing MAH 095 (Beginning Algebra), MAH 099 (Intermediate Algebra), MAT109 (College Algebra), and, for students intending to study Computer Science, MAT 119 (Pre-Calculus Mathematics). Appropriate placement in mathematics courses is determined by high school transcripts, other college transcripts if available, SAT or ACT scores, or placement tests administered at NKU. Students will meet with their advisors to determine appropriate placement.

Students should be careful to check the prerequisites for MAT courses. In particular, a prerequisite of "MAH 099 or placement" means that mastery of two years of high school algebra will be assumed.

## COMPUTER SCIENCE

## Bachelor's Degree Program

Computer science is an applied science that investigates the structure and transformation of information. Computer scientists develop algorithms to solve problems in a wide range of areas from network security to computer graphics and artificial intelligence. A key application of computer science is in software engineering, which is concerned with the design and analysis of complex real-world systems and their representation in terms of computer code. Software development plays a role in many computer science courses, although the focus of the major extends far beyond programming. The study of computer science cultivates a mix of creative talent, problem solving skills, and technological expertise. While some NKU computer science majors pursue advanced degrees after graduation, most are employed in positions such as software analyst, systems architect, or software engineer.

A major in computer science, leading to the degree of Bachelor of Science, requires the following:

1. INF 260, INF 282, INF 284, INF 286, CSC 360, CSC 362, CSC 364, CSC 402, CSC 440, CSC 460, and CSC 485.
2. Two 400 -level CSC courses not included in requirement 1 . Two 300- level or 400-level CSC course not included in requirement 1.
3. The calculus sequence: MAT 128, MAT 227, MAT 228 (or the alternate sequence MAT 129, 229); STA 250 and MAT 385).
MAT 360 may also count as one of these four courses.
A grade of $D$ is not applicable to the major. Students majoring in computer science are urged to obtain a minor (or a second major) in a related area. Such a minor enhances career opportunities and furthers appreciation of computer applications. Students interested in graduate study in computer science are advised to take a mathematics minor including MAT 225, MAT 302, and MAT 360.

## The Minor in Computer Science

A minor in computer science consists of 21 semester hours of computer science, computer information technology and informatics (INF) courses that must include INF 260, CSC 360, either CSC 362 or CSC 364, and at least 6 more hours with the CSC prefix. A grade of $D$ is not applicable to the minor.

## Endorsement for Teachers of Computer Science

Endorsement to teach computer science at the secondary level requires:

1. Prerequisites for admission: Undergraduate students must have been admitted to the secondary education major. Post-bachelor students must have secondary certification.
2. Required courses:
a. MAT 112, MAT 129, or MAT 128.
b. STA 205, STA 212, or STA 250.
c. INF 101.
d. All of INF 260, CSC 360, CSC 362, CSC 364.

Any substitution in this program must be approved by the computer science chair.

## COMPUTER INFORMATION TECHNOLOGY

 Bachelor's Degree ProgramThe computer information technology major is designed to provide students with a broad background in information technology as found in a wide spectrum of organizations, including government, health care, business, and education. The "hands-on" curriculum explores a variety of areas that fall outside the realm of traditional academic computing disciplines in order to prepare a new breed of technology experts who can support, troubleshoot, maintain, repair, and supply training for the growing general application of software and hardware technologies. Graduates of this program will be prepared for employment in a variety of positions
dealing with the support and administration of hardware and software technologies used in networks, systems, security and the Web.

A major in computer information technology, leading to the degree of Bachelor of Science, requires the following:

1. Support Courses

MAT 185; PHI 210; ENG 347.
2. Core Courses

INF 260, INF 282, INF 284, INF 286, CIT 140, CIT 141, CIT 370, CIT 383.
3. Specialization Tracks

Students will select (at least) one of the following two specialization tracks to complete their degree requirements.
a. Database and Web Development Track

The Database and Web Development Technology track is designed to produce graduates who have a broad yet detailed understanding of issues pertaining to the development of effective, interactive web-based environments. The track requires the following courses:

ART 221, CIT 301, CIT 386, CIT 472, and two CIT 300- or 400-level electives.
b. Networking and SecurityTrack

The Networking and Security track is designed to provide the student with a solid understanding of the software, hardware and applications involved in the administration of networks, systems and computer security. The track requires the following courses: CIT 380, CIT 384, CIT 470, CIT 484 and two CIT 300- or 400-level elective.

A grade of $D$ is not applicable to the major

## MINORS

## The Minor in Computer Information Technology

A minor in Computer Information Technology is 21 hours and consists of the following:

One of INF 110, INF 120 or INF 260
Each of CIT 140, CIT 141, and CIT 370
At least one 300-level or 400-level CIT elective

And an additional 6 hours of courses with the INF, CSC, or CIT prefix not listed above.
Note that CIT advanced courses have INF and CSC pre-requisites. A student wishing to minor in Computer Information Technology should examine the courses in the back of the catalog and prepare appropriately by taking the necessary INF/CSC course(s). INF 282, INF 284, INF 286, and CIT 301 are the common pre-requisites and students should take one or more of these to fulfill the additional hours for the minor.

## The Minor in Computer Forensics

The Computer Forensics minor combines courses from Computer Information Technology in the Department of Computer Science and courses from Criminal Justice in the Department of Political Science and Criminal Justice. The minor requires the following 24 hours: CIT 140, CIT 370, CIT 380, CIT 430, JUS 101, JUS 204 or JUS 205, JUS 303, and JUS 404.

## The Minor in Information Security

The minor in Information Security requires completion of at least 24 hours of courses including CIT 140, CIT 370, CIT 380, BIS 300, BIS 330, and BIS 382, and at least two electives chosen from CIT 430, CIT 484, CSC 482 and CSC/MAT 483.

## THE SCHOOL OF NURSING AND HEALTH PROFESSIONS

## CONTACTING THE SCHOOL

The School of Nursing and Health Professions is located in AHC 303 and may be reached during business hours by telephone at 859-5725248. Interested persons are invited to browse the school's web site at www.nku.edu/~nhp.

Denise Robinson, interim chair
Annie Dollins, assistant chair
Louise M. Niemer, director, bachelor of science in nursing program
Carrie McCoy, director, accelerated bachelor of science in nursing program
Ann Keller, director, bachelor of science in nursing for registered nurses program
Marilyn Schleyer, assistant chair and director, master of science in nursing program
Trina L. Koscielicki, director, radiologic technology
Debra K. Kasel, director, respiratory care
Andrea Cornuelle, director, bachelor health science

## NURSING FACULTY

Margaret Anderson, Dianne Benedict, Joy A. Churchill, Adele Dean, Cindy Foster, Judi Frerick, Mary A. Gers, Sandra Grinnell, Julie Hart, Beth Hickey, Billie Jean Kosak, Jayne Lancaster, Marilyn Lottman, Caron Martin, Sara Mohn, Pam Phares, Catherine Pence, Kris Pfendt, Kim Dinsey-Read, Erin Robinson, Elizabeth Schoulties, Cheryl L. Swayne, Catherine Taggert, Amber Thomas, Sandra Turkelson,

## RADIOLOGIC TECHNOLOGY FACULTY

Andrea J. Cornuelle, Diane H. Gronefeld, Karen Leek, Valerie Rowland

## RESPIRATORY CARE FACULTY

Robert Johnson, Robert Langenderfer, Deb Patten

DEGREES OFFERED BY THE SCHOOL OF NURSING AND HEALTH PROFESSIONS<br>Associate Degrees<br>Applied Science<br>Radiologic Technology<br>Respiratory Care

Bachelor's Degrees
Bachelor of Science in Nursing
Traditional Four-Year Nursing Program Degree Completion Program for Registered Nurses Accelerated Program for Second Degree Students

## Bachelor of Health Science

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Graduate Programs (see Graduate Catalog for information)
Master of Science in Nursing
Nursing Administration
Primary Care Nurse Practitioner
Nursing Education
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SCHOOL ACCREDITATION/AFFILIATIONS
Joint Review Committee on Education in Radiologic Technology Committee on Accreditation for Respiratory Care
National League for Nursing Accreditation Commission

## SCHOOL-WIDE PRE-MAJOR AND SELECTIVE ADMISSION REQUIREMENTS

See individual departments section for specific admission requirements.

## SCHOOL-WIDE GRADUATION REQUIREMENTS

See individual departments section for specific admission requirements.

## STUDENT PROFESSIONAL ASSOCIATIONS/ ORGANIZATIONS

Kentucky Association of Nursing Students
Radiologic Technology Student Club
Lambda Beta Society (National Honor Society for Respiratory
Care)
Rho Theta, (Sigma Theta Tau International Nursing Honor Society)

## BACCALAUREATE DEGREE PROGRAMS IN NURSING Traditional Four-Year Baccalaureate Nursing Degree Program

The curriculum of the baccalaureate degree program (BSN) is based on concepts and theories of nursing, liberal arts, and the sciences. The nursing process is incorporated throughout the curriculum. Carefully planned clinical experiences are an integral part of each nursing course, beginning in the second semester and continuing throughout the four years.

Hospitals and health care agencies in northern Kentucky and greater Cincinnati serve as clinical practice settings during day and evening hours.

Graduates of the program are prepared to function as a provider of care, a manager of care, and a member of the discipline of nursing. They use critical thinking, communication, and technical skills in providing care to individuals and families. Knowledge is specific and factual and can be applied directly to practice.

Graduates are awarded the degree of Bachelor of Science in Nursing and are eligible to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN) and to continue their education at the masters and doctoral levels.

## Accreditation

The program is approved by the Kentucky Board of Nursing, Suite 300, 312 Whittington Parkway, Louisville, KY 40222-5172; phone 502-329-7000 and is accredited by the National League for Nursing Accreditation Commission (NLNAC), 61 Broadway, New York, NY 10006; phone 212-363-5555.

Applicants please note: The Kentucky Board of Nursing has regulations regarding previous felony and misdemeanor convictions that must be addressed prior to sitting for the licensure examination. Background checks may be required for some clinical placements.

## Pre-Major and Selective Admission Requirements

Upon completion of all required developmental coursework, students enrolled in the University may declare the pre-nursing baccalaureate as their major. Students majoring in pre-nursing will be advised by a member of the nursing faculty to help them develop a plan for nursing education at Northern. Pre-nursing students may enroll in courses that fulfill pre-admission requirements and general education and/or in support courses required for the baccalaureate degree nursing program. However, students must be admitted to the nursing program in order to take courses
in nursing. Students enrolled in courses as a pre-nursing major should declare (XNRS) as their major.

## Admission Requirements

## Advanced Standing for Licensed Practical Nurses

Application may be made for advanced standing in the baccalaureate degree program by licensed practical nurses who have been accepted into the program. Credit for NRS 104, NRS 104L, and NRS 196 will be considered.

The licensed practical nurse must have completed a practical nursing program within the past four years or be actively employed as a LPN.

Testing dates for advanced standing may be obtained by contacting the Department. An advanced standing examination may be taken only once. Students can challenge NRS 105.

All students are required to complete the last 30 semester hours of the major at Northern Kentucky University.

Applicants who apply by February 1 are applying to begin his/her first nursing courses the following January. Applicants who apply by October 1 are applying to begin his/her first nursing courses the following August.

Applicants wishing to be considered for admission must

1. be admitted to Northern Kentucky University; any restrictions or stipulations must be removed;
2. submit a baccalaureate degree nursing program application (this is in addition to the University application);
3. submit official transcripts indicating completion of high school, or equivalent GED);
4. submit evidence of completion of high school biology and chemistry (or college equivalent) with a grade of $C$ or better;
5. meet University pre-college requirements;
6. submit transcripts of all prior college work and nursing courses taken (including practical nursing school), if applicable;
7. achieve a minimum composite of 20 on the American College Test or a college/university grade-point average (GPA) of at least 2.5 for a minimum of 24 semester hours completed at an accredited institution; with a requisite science course with a lab.
8. submit evidence of a cumulative grade-point average (GPA) of at least 2.5 for all college/university courses completed.

## Other Relevant Admission Considerations

Post-bachelor's degree applicants must meet requirements 1, 2, 4, 6 and 8 above. A license in practical nursing meets the high school biology requirements.

Previously earned college credits for the science courses required for the nursing program, i.e., BIO 202-202L, 208-208L, 209-209L, and CHE 115-115L, will be accepted only if completed with a grade of $C$ or better within eight years prior to the date of admission to this program.

The American College Test (ACT) is required for those applicants with fewer than 24 semester hours from an accredited institution.

All applicants transferring from a nonaccredited institution are required to take the American College Test (ACT).

A personal interview may be requested by the Nursing Admissions/ Readmissions Committee.

## NKU School of Nursing and Health Professions Policy: Student Criminal Background Check

Healthcare agencies are charged with providing care and protecting the safety of vulnerable populations including children and the aged. Agencies utilized for clinical placement require students to undergo criminal background checks and may deny clinical access to those convicted of felonies and certain misdemeanors. Conviction of these offenses may result in a student's denial of admission to, or dismissal from, the School of Nursing and Health Professions.

Applicants are required to submit to criminal background checks as identified by the School of Nursing and Health Professions as a part of the
application process. The cost of this and any subsequent screening will be borne by the student. The student is responsible for notifying the School of Nursing and Health Professions of any change in the status of this record. Note that successful completion of a criminal background check does not insure eligibility for certification, licensure, or future employment.

## Admitted Students

## Students must

1. maintain the GPA originally required for admission;
2. submit a completed health form and immunization record prior to beginning clinical courses;
3. provide proof of CPR certification prior to beginning clinical courses;
4. purchase professional liability insurance through Northern Kentucky University (paid with tuition);
5. purchase appropriate uniforms prior to the first day of clinicals;
6. provide own transportation to clinical agencies;
7. provide proof of health insurance coverage or sign a health insurance waiver.

## Transfer Students

Students previously enrolled in another NLNAC accredited program in nursing may be eligible to transfer into the nursing program at Northern.

In addition to the requirements listed above, the following apply to all transfer students:

1. Transfer students are considered on a space-available basis. Eligibility is determined by the Nursing Admission/Readmission/ Promotion and Graduation Committee.
2. The following must be submitted:
a. A letter from the director of the previous program attended explaining the reasons for withdrawal.
b. Official transcripts of all college work attempted.
c. Syllabi of all nursing courses taken.
3. An interview may be requested, by APG Committee.
4. Students requesting advanced placement in the nursing program may be required to pass a simulated clinical performance and dosage computation examination. In addition, a written theory examination may be required.
5. The last 30 semester hours of the major must be completed at Northern Kentucky University.

## SCHOOL POLICIES

The school reserves the right to change the program of study as needed to fulfill state approval and national certification. These include: National League for Nursing Accrediting Commission (NLNAC) 61 Broadway, New York, NY 10006, Kentucky Board of Nursing, Joint Review Committee on Education in Radiologic Technology (JRCERT), the Committee for Accreditation for Respiratory Care (COARC), and/or University requirements.

## Progression

Students wishing to pursue the baccalaureate degree program may take the general education support courses required prior to admission to the program. However, students must be admitted to the baccalaureate degree nursing program in order to take courses in nursing.

Upon matriculation into the baccalaureate degree program, students must take the last 30 semester hours at NKU.

Students are required to complete the nursing program within eight years of the first date of admission to the program.

To continue in the nursing program, students must maintain a grade-point average of at least 2.3 and achieve a grade of $C$ or higher in all required nursing, biology, and chemistry courses.

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Students withdrawing from the nursing program for any reason must have an exit interview with the program director and/or faculty advisor, and must complete and sign a withdrawal form.

Students may repeat only one semester of nursing. If a theory component or clinical nursing course component are repeated, both must be repeated concurrently.

Students may repeat only two semester of science courses.

## Readmission

Applications for readmission to the nursing program will be considered on an individual basis. Students must submit an application for readmission to the Admissions, Progression, and Graduation Committee. A letter supporting the request for readmission must be attached to the application. This letter should outline strategies for success in the program.

Students applying for readmission may be required to have an interview with the program director and/or faculty adviser. Application forms are available from the Office of Admissions. Application must be made by February 1 for fall semester and October 1 for spring semester.

To be considered for readmission, a student reapplying to the baccalaureate degree program must have a grade-point average of 2.3 or better and be able to complete the program of study within eight years of the initial entry into the nursing program.

The faculty may state that written, specific conditions be met by the student when recommended for readmission.

A student who did not successfully complete the first semester of the nursing program must apply as a new student and meet all requirements listed under "Admission Requirements."

Students who have been dismissed from the nursing program are not eligible for readmission (see Baccalaureate Degree Nursing Program Student Handbook).

Students readmitted to the program are subject to the requirements of the catalog in effect for all nursing courses at the time of re-entry.

## Student Advising

Upon admission to the nursing program, students are assigned to a faculty academic adviser and are required to meet with this adviser at least once each semester. Students are encouraged to maintain regular contact with their adviser so that progress and performance can be discussed and counseling provided as necessary.

## Program of Study

Students must fulfill all requirements for the baccalaureate degree program, including required general education courses, support courses, and nursing courses.

| General Education Courses (33 semester hours) |  |
| :--- | :--- |
| ENG 101 College Writing | 3 |
| ENG 291 Advanced College Writing | 3 |
| SPE 101 Principles of Speech Communications | 3 |
| Literature Elective | 3 |
| History Elective | 3 |
| Social Science Elective | 3 |
| Humanities Elective | 3 |
| Fine Arts Elective | 3 |
| Race and Gender Elective | 3 |
| Non Western Elective | 3 |
| 300-level Elective | 3 |


| Support Courses (31 semester hours) |  |
| :--- | :--- |
| BIO 208/208L Human Anatomy \& Physiology I | 4 |
| BIO 209/209L Human Anatomy \& Physiology II | 4 |
| BIO 202-202L Microbiology for the Health Professions | 4 |
| BIO 126 Human Nutrition | 3 |
| CHE 115/115L Physiological Chemistry | 4 |
| PHI 220 Health Care Ethics | 3 |
| PSY 220 Life Span Development | 3 |

Support Courses (31 semester hours)
BIO 208/208L Human Anatomy \& Physiology I
BIO 202-202L Microbiology for the Health Professions
BIO 126 Human Nutrition
CHE 115/115L Physiological Chemistry
PSY 220 Life Span Development

PSY 100 Into to Psychology
STA 205 Introduction to Statistical Methods
The sequential progression of the BSN program requires that the above general education and support course requirements be taken as prerequisites or corequisites to designated nursing courses.

| Nursing Course Requirements (70 semester hours) |  |
| :--- | :--- |
| NRS 100L Skills Development Lab |  |
| NRS 196 Fundamental Med-Surg Clinical I | 2 |
| NRS 105 Pharmacology | 1 |
| NRS 204 Intermediate Medical surgical Nursing I | 4 |
| NRS 296 Intermediate Med-Surg Clinical I | 4 |
| NRS 205 Holistic Nursing Assessment | 2 |
| NRS 205L Nursing Assessment Lab | 1 |
| NRS 206 Obstetric Newborn Nursing | 3 |
| NRS 297 Obstetric Newborn Nursing Clinical | 2 |
| NRS 207 Pediatric Nursing | 3 |
| NRS 298 Pediatric Nursing Clinical | 2 |
| NRS 304 Intermediate Medical-Surgical Nursing II | 3 |
| NRS 305 Psychiatric Nursing | 3 |
| NRS 397 Psychiatric Nursing Clinical | 2 |
| NRS 306 Advanced Medical-Surgical Nursing | 3 |
| NRS 321 Professional Issues | 3 |
| NRS 332 Nursing Theory | 3 |
| NRS 396 Intermediate Medical-Surgical Clinical II | 4 |
| NRS 398 Role Transition Practicum | 5 |
| NRS 398L Role Transition Lab/seminar | 1 |
| NRS 404 Community and Public Health Nursing | 3 |
| NRS 406 Health Care Leadership | 4 |
| NRS 421 Health Care Research | 3 |
| NRS 496 Community and Public Health Nursing Clinical | 4 |
| NRS 498 Nursing Leadership Practicum | 4 |

## Bachelor of Science for Registered Nurses

The bachelor's degree program for RN's (RN-BSN) provides career mobility for the registered nurse. A substantial background in the liberal arts is an integral part of preparation for professional nursing. The upper-division curriculum blends scientific and humanistic theories with nursing theories to provide graduates with a foundation for professional nursing practice. Graduates are prepared to function in primary, secondary, and tertiary care settings and in roles that are dependent, interdependent, or independent according to the level of care required. They are able to lead and influence colleagues and co-workers for the enhancement of their knowledge and skills, thereby effecting change to promote quality nursing care for clients in any health care setting. The registered nurse to bachelor's degree program is designed to provide a foundation for higher degree programs in nursing. The online RN-BSN provides career mobility for RN's who need the high flexibility that distance education can provide. The department reserves the right to change the program of study as needed to fulfill national certification, approved by the Kentucky Board of Nursing, and/or University requirements.

Graduates are awarded the Bachelor of Science in Nursing degree.

## Accreditation

The BSN program is fully accredited through the National League for Nursing Accreditation Commission (NLNAC), Council of Baccalaureate and Higher Degree Programs, 61 Broadway, New York, NY 10006; phone 212-363-5555.

## Student Advising

All students considering admission to the registered nurse to bachelor's degree program are advised to contact the RN-BSN degree faculty regarding criteria for admission and guidance in course selection. Students are expected to maintain close contact with their adviser throughout the program of study. It is the responsibility of the student to initiate at least one advising session each semester. Prior consent of the adviser
should be obtained before registering for any courses. Students are cautioned not to rely on the advice of other students regarding the applicability of courses.

## Pre-Major and Selective Admission Requirements

Students enrolled in courses at Northern Kentucky University preparing for admission to the registered nurse to bachelor's degree program should declare as their major Pre-Baccalaureate Nursing. Upon acceptance to the program, students are assigned to a faculty adviser and must declare the major of bachelor's in nursing.

Students enrolled in Distance Bachelor of Science Program for Registered Nurses preparing for admission should declare as their major prebaccalaureate nursing distance. Upon acceptance to the distance program, students must declare the major baccalaureate nursing distance.

## Admission Requirements

The applicant will

1. complete an application for admission to Northern Kentucky University;
2. in addition to the University application, submit the Registered Nurse to Bachelor's Degree Nursing Program application to the Department of Nursing (applications obtained from and returned to the Department of Nursing);
3. submit to the Office of Admissions
a. official transcripts from an associate degree or diploma program in nursing;
b. official transcripts of all postsecondary work completed.
4. meet the following criteria:
a. be admitted to Northern Kentucky University;
b possess a cumulative grade-point average of 2.50 or higher on a 4.00 scale;
c. hold current RN licensure. Proof of Ohio and Kentucky licensure is mandatory prior to the first day of any clinical course;
d. complete each of the following prerequisite courses or its equivalent by taking the course in a college or university or by taking proficiency examinations.

Human anatomy and physiology 6-8
Microbiology with laboratory 3-4
English composition 6
Psychology 3
Human growth and development 3
Sociology/Anthropology 3
Statistics 3-4
General education 27
Ethics 3
Electives $\quad \underline{27-28}$
Total 84-89
Courses required as prerequisites for admission will be applied toward the general education requirements where applicable.

## Bachelor of Science in Nursing for Second Degree Students (Accelerated Bachelor of Science in Nursing)

The Bachelor of Science in Nursing for 2nd degree students (ABSN) provides preparation for registered nursing practice. The curriculum is comprised of both didactic and clinical components.

The curriculum blends scientific and humanistic theories with nursing theories to provide graduates with a foundation for professional nursing practice. The A.B.S.N. program is designed to provide a foundation for higher degree programs in nursing.

Faculty members hold a doctoral or master's degree, and many are certified within their individual areas of specialty. Members of the faculty continue to practice in health care and participate in research and other scholarly endeavors.

Graduates of the ABSN program are awarded the degree of Bachelor of Science in Nursing, and are eligible to apply to take the NCLEX-RN exam for licensure as a registered nurse.

The ABSN Program is designed for Bachelor's prepared or post-baccalaureate individuals who want to make a career change. The course requirements for the accelerated program are the same as those provided in the traditional BSN program, and pre-requisites are required. However, the accelerated program is fast-paced and rigorous incorporating an entire 4 -years of nursing courses into sixteen (16) to eighteen (18) months. The accelerated program is designed for non-working, full time students who can immerse themselves into the content.

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The program is approved by the:
Kentucky Board of Nursing
312 Whittington Parkway, Suite 300
Louisville, KY 40222-5172
1-502-329-7000
The program is accredited by:
National League for Nursing Accreditation Commission (NLNAC)
61 Broadway
New York, NY 10006
1-212-363-5555
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## Student Advising

All students contemplating admission to the Accelerated ABSN Program are advised to contact the director of the program to be advised regarding admission requirements. Students admitted to the ABSN Program are assigned an advisor and are expected to maintain close contact with their advisor throughout the program of study. It is the responsibility of the student to initiate at least one advising session each semester.

## Admission Requirements

Admission to the ABSN Program is highly selective. Priority admission will be given to students whose academic record reflects strength in the sciences and math.

1. Graduate of an accredited college or university with a bachelors or higher degree.
2. Admitted to the University as a degree-seeking student with postbaccalaureate status without restrictions.
3. Minimum cumulative GPA of 2.7 on a four-point scale.
4. Completion of the following pre-requisite courses with a grade of at least a $C$. Pre-requisites taken at another university are not considered completed until the course has been transferred to Northern Kentucky University and posted on the student's NKU transcript. NO EXCEPTIONS.
a. One full year of anatomy and physiology with labs (BIO 208, 208L, BIO 209, 209L)
b. Chemistry with a lab (CHE 115, 115L; or CHE 120, 120L, CHE 121, 121L.
c. Microbiology with lab (BIO 202, 202L)
d. Health Care Ethics (PHI 220; PHI 155 will be accepted as an alternative)
e. Nutrition (BIO 126)
f. Introductory Statistics (STA 205)
g. Growth and Development (PSY 220 or EDU 300)
5. The applicant has no grades below $C$ within the past four years in any of the pre-requisite courses.
6. A grade of $C$ or higher must be achieved in all nursing courses in order to remain in the program. Students earning a grade below $C$ will be dismissed from the ABSN program.
a. Students that have not yet completed their degree, but wish to pursue a nursing degree after completion of their bachelor's degree in another field, may apply in the semester prior to graduation provided they meet the above criteria. Students must have a letter from their academic advisor indicat-
ing that the student will graduate prior to the semester in which they plan to start the ABSN Program.
b. Students who have not completed all of the pre-requisites (see below) may apply to the program when they have completed at least two natural science pre-requisite courses with a grade of $C$ or better. Students with pre-requisites remaining must submit a plan to complete all pre-requisites prior to the first semester of the accelerated program. Students who have not yet completed all pre-requisites but meet other admission criteria will be accepted into the applicant pool.
c. A waiver to the 8-year requirement may be requested if the applicant believes he/she can demonstrate current knowledge related content of the course he/she wishes to have waived (e.g. Registered Dietician currently working as a dietician, educator teaching the course content). All requests for waivers must be made in writing to the Chair of the Admission, Progression and Graduation Committee and must accompany the application for admission with documentation of the course content.

## Admission Procedure

1. Apply to the University as a degree-seeking student with postbachelor status.
2. Declare pre-nursing as your major.
3. Send copies of official transcripts from all colleges previously attended to the Office of Admissions, Northern Kentucky University (if applicable).
4. After receiving official notice of admission to the University as a degree-seeking student without restrictions and completion of at least two Natural Science pre-requisite courses with a grade of C or higher, complete a separate application for admission to the ABSN Program. On the application, check Accelerated BSN Program.
5. Include with the application your plan for completion of all prerequisites prior to starting the ABSN Program and any requests for waivers addressed to the chair of the Admission, Progression and Graduation Committee.
6. Mail or hand deliver application to: Attention: Admission Progression and Graduation Committee, Department of Nursing, Northern Kentucky University, 303 Albright Health Center, Highland Heights, KY 41099.

## Progression

1. Students admitted to the ABSN Program are subject to the program requirements of the catalog in effect at the time of entry.
2. Upon matriculation into the ABSN Program, students must take the last 30 semester hours at NKU.
3. The program of study must be completed within two years of the first date of entering the program.
4. Students are expected to progress sequentially through the nursing program.
5. In order to be eligible to enroll in a succeeding nursing course, the student is required to meet all program requirements and academic standards.
6. A grade of $C$ or higher must be achieved in all nursing courses.
7. Critical skills: Students are required to show ability to perform certain basic nursing skills during each semester. Failure to demonstrate continued ability to perform these skills will provide a basis for failure of the clinical component.
8. Students must concurrently take and pass nursing courses that are co-requisites.
9. Failed nursing courses (grade below a $C$ ) may not be repeated in the accelerated program.

## Readmission

Students who fail a nursing course in the accelerated program (grade below a $C$ ) are not eligible for readmission to the accelerated program. Students may apply for admission to the traditional baccalaureate program.

Applicants please note: The Kentucky Board of Nursing has regulations regarding previous convictions that must be addressed prior to sitting for the licensure examination. All felony and misdemeanor convictions must be reported when applying for licensure.

## BACHELOR OF SCIENCE IN HEALTH SCIENCE

The Bachelor of Health Science (BHS) degree is an interdisciplinary program that provides an opportunity for health professionals to enhance their knowledge and skills, improving the possibility for career mobility. This degree program is designed for those individuals who have earned an associate degree or are completing their professional coursework in a clin-ically-based approved allied health discipline and want to expand their education. Because a strong background in liberal arts is an integral part of preparation for advanced careers, the curriculum is flexible and broadbased, with electives in psychology, sociology, aging, management, communication, advanced imaging, and respiratory care. In addition to promoting the "team concept" in health care, the curriculum prepares graduates for a variety of positions at health related organizations, including administration, management, and advanced clinical practice. The upper division courses blend technical and humanistic theories to provide graduates with a foundation for advanced positions in the respective discipline. Through enhanced knowledge and skills, graduates will be able to lead and influence colleagues and co-workers in the advancement of their professions.

## Admission Process:

Students must be enrolled in or a graduate of a clinically-based associate degree program in an allied health discipline. Enrolled students must be in the second year of the RAD or RSP program to be eligible to declare the major in Health Science and may declare a double major, RAD or RSP in HSCI.

Interested students must submit a Health Science program application to the School of Nursing and Health Professions and may subsequently declare the major, HSCI for on-campus courses or HSC for the online program. Many of the upper-level courses may be completed while enrolled in RAD or RSP program courses. Advanced level courses may have discipline-specific prerequisites or co-requisites that restrict students from enrolling; pre-requisites and co-requisites are listed in the course descriptions in the University Catalog.

## Academic Requirements

To be eligible for admission to the Health Science program, students must meet the following criteria:

1. Possess a cumulative grade point average of 2.0 or higher on a 4.0 scale.
2. Demonstrate knowledge and understanding of anatomy and physiology with a grade of $C$ or better in Human Anatomy and Physiology I and II.

## Transfer Students

Graduates of associate degree programs in a clinically-based heatlh care discipline must:

1. Be admitted to Northern Kentucky University.

2 Be registered in their discipline.
3 Submit a copy of the card certifying registration with the appropriate certification body to the School of Nursing and Health Professions.
4 Submit the following documents to the Office of Admissions:
a. Official transcripts verifying completion of an appropriate associate degree.
b.Official transcripts of all postsecondary work completed.
*Graduates of certificate programs must complete an associate degree program and should contact the relevant program director for more information.

## Criminal Background Check:

Students planning to complete clinical practica as electives must submit to criminal background checks as previously described in the introduction to the School of Nursing and Health Professions.

## Advanced Standing:

Healthcare practitioners who have completed professional coursework, earning a certificate, and subsequently passing the national board exam in either radiologic technology or respiratory care will be eligible for advanced placement and may receive credit for professional courses in the appropriate discipline. Students may need to complete additional courses to fulfill University graduation requirements.

## Student Advising:

Upon admission to the BHS program, students are assigned to a faculty advisor who will assist in developing an appropriate course of study. Students are encouraged to contact their advisor each semester to discuss progress, performance and career goals. An additional per credit hour fee is added to the tuition for online courses.

## Expenses:

In addition to usual university tuition, fees, and textbooks, students completing advanced clinical practica may be responsible for costs related to updating immunizations, CPR certification, professional liability insurance, and criminal background checks.

## Course of Study

The BHS program includes 30 hours of interdisciplinary and disci-pline-specific BHS core coursework following two years of core professional coursework in a clinically-based health care discipline, radiology/ imaging sciences or respiratory care and completion of University general education coursework.

Students who begin their college career at NKU will complete a year of general education courses, including any pre-requisite courses for their area of interest, prior to starting the core professional coursework. Both the Radiologic Technology and Respiratory Care programs admit students through a selective admission process, which requires that students be familiar with the admission requirements for the program chosen. After being selected for admission to either of the professional programs, students will complete the two-years of discipline-specific coursework, as well as any remaining general education courses required. Following completion of the discipline-specific core courses, students are eligible to receive the Associate of Applied Science Degree.

Transfer students must have earned an associate degree in an appropriate discipline. The associate degree serves as an embedded minor and satisfies the minor requirement for the University. Students entering the University with a certificate of program completion must complete the requirements for either the Radiologic Technology Program or the Respiratory Care Program at NKU.

A bachelor of science in health science degree is granted upon completion of all program and university requirements.
General Education Requirements (50 semester hours):
$\begin{array}{ll}\text { ENG } 101 \text { College Writing } & 3 \\ \text { ENG } 291 \text { Advanced College Writing } & 3\end{array}$
ENG 291Advanced College Writing 3
SPE 101Principles of Speech Communication 3
STA 205 Introduction to Statistical Methods or
STA 212 Statistics for Business Applications 3
BIO 208 and L* Human Anatomy \& Physiology I and Lab 4
BIO 209 and L* Human Anatomy \& Physiology II and Lab 4
HIS XXX General Education Elective
3
ENG 2XX General Education Literature Elective 3

Humanities Electives* 6
Fine Arts Elective 3
Behavioral Science Electives* 6
Social Science Elective 3
Non-western Elective 3
Race/Gender Elective 3

* Students are encouraged to complete PSY 100, SOC 100, and PHI 155 or 220 to meet pre-requisite requirements for upper level electives in the BHS core.


## Core Curriculum (30) semester hours)

RAD $310^{(1)}$ Advanced-Radiographic Anatomy or RSP $441^{(2)}$ Disease management I or elective
NRS 105 Pharmacology
BHS 410 Healthcare Management 3
BHS 460 Advanced Patient Care 3
BHS 490 Seminar
LDR 382 Organizational Change 3
NRS 421 Research 3
Gerontology Requirement (choose 1) 3
NRS 413 Aging in Today's Society
SOC 342 Sociology of Aging
HSR 306 Introduction to Gerontology
Other Electives: (choose 3)
RAD $450{ }^{(1)}$ Advanced Imaging Pathology
RAD 470 ${ }^{(1)}$ Advanced Imaging
RAD $496{ }^{(1)}$ Advanced Imaging Practicum (may be repeated)
RSP $442^{(2)}$ Disease Management II
RSP $451^{(2)}$ Polysomnography I
RSP $452^{(2)}$ Polysomnography II
RSP $496^{(2)}$ Clinical Practicum VI
HSR 314 Death, Dying \& Grief
LDR 315 Personnel Management
LDR 308 Leadership in Organizations
PHI 302 Ethics \& Science
PSY 333 Abnormal Psychology
PSY 405 Counseling Psychology
PSY 465 Health Psychology
SOC 355 Sociology of the Environment
CMST 220 Interpersonal Communication or CMST 303 Organizational Communication
( ${ }^{(1)}$ open to RAD students only
${ }^{(2)}$ open to RSP students only
(

## Suggested Sequence of Courses for BHS Core*

Semester I
RAD 310 Advanced Radiographic Anatomy or RSP 441 Disease Management I or elective 3
NRS 105 Pharmacology 2
BHS 460 Advanced Patient Care 3
NRS 421 Healthcare Research 3
Elective 3 Semester Total 14

Semester 2
BHS 410 Healthcare Management 3
BHS 490 Seminar 1
LDR 382 Organizational Change 3
Gerontology Elective 3
Electives 6
Semester Total 16

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*Students who have not fulfilled their bachelor's degree general studies requirements prior to their last year will have additional courses to complete.

## Policies and Requirements

1. Students admitted to the program are subject to the program requirements of the catalog in effect at the time of admission.
2. Students admitted to the program are subject to University requirements and must complete the general education requirements in the catalog of record (usually the catalog in effect when admitted to the University). As this is a new program, students admitted to the University prior to Fall 2006 must change to the 2006/2007 Catalog when they declare the Health Science major, this may affect general education requirements.
3. Students may complete general education courses concurrently with core courses, but must be aware that some of these courses may be pre-requisites for upper division electives.
4. Students must earn a grade of C or better in all required Health Science courses.
5. Upper division Bachelor of Health Science courses completed at another institution will be evaluated for transfer credit on an individual basis.
6. Prior to the first day of any clinical course, students must provide proof of:
-Current ARRT, ARDMS, NMTCB, or NBRC registration
-Current CPR certification
-Completed Health Form documenting immunizations -Student liability insurance purchased through the University.
7. A minimum of 128 semester hours are required for graduation; the last 30 must be completed at Northern Kentucky University.
8. At least 45 semester hours of upper division coursework must be completed prior to graduation. associate degree graduates who submit documentation of national certification registry are eligible to receive a waiver of 18 of those hours.

## RADIOLOGIC TECHNOLOGY PROGRAM

The curriculum of the associate degree program in radiologic technology is a 22-month program that prepares students for entry-level work in the radiology specialty of radiography (diagnostic x-ray). Graduates are competent in routine radiographic and fluoroscopic diagnostic procedures as well as in selected specialized procedures.

Education for the radiography student is an integrated plan of classroom, laboratory, and clinical education. Courses include patient care, human structure and function, radiation biology and protection, principles and techniques of diagnostic imaging, radiation physics, and image evaluation. In addition to their regular classroom coursework, students spend an average of 20 hours per week practicing their skills at one of the following clinical sites:

St. Elizabeth Medical Center-South Unit
St. Elizabeth Medical Center-Grant County
St. Luke Hospital East
St. Luke Hospital West
The Jewish Hospital
Mercy Hospital Anderson
Mercy Clermont Hospital
Dearborn County Hospital
Additional affiliations are maintained with orthopedic offices to provide experience in this type of setting. Other opportunities are also available for elective rotations during the second year of the program. Although most courses are taught during the day, some are scheduled in late afternoon or evening during the second year of the program.

Graduates receive the degree of Associate of Applied Science in radiologic technology and are eligible to sit for the examination of the American Registry of Radiologic Technologists. Upon passing the examination, graduates may use the designation R.T.(R) and are also eligible to apply for an operator's license in the applicable state of employment.

The NKU Radiologic Technology Program is accredited by the Joint Review Committee on Education in Radiologic Technology (http:// www.jrcert.org)

## Pre-Major and Selective Admission Requirements

Admission to the radiologic technology program is accomplished through a selective admissions process that includes an academic screening, criminal background check and hospital observation; verification of immunizations is required of accepted students. The Radiologic Technology Admissions Committee determines academic eligibility and ranks the applicants.

Approximately twenty-eight students are accepted into each class. Names of other candidates meeting the admission criteria are placed on a waiting list and are accepted for the current year if vacancies occur prior to the start of the Introduction to Radiography course in July. Preference is given to students who have completed all admission requirements prior to 15 February.

## ACADEMIC SCREENING

Academic criteria have been established to ensure that students meet the minimum requirements needed to be successful in the program. Numerical values are assigned to the GPA, completion of requisite coursework, total number of credit hours completed, and hospital observation. Students must meet the following admission requirements prior to starting the program:
a. Satisfactory completion of:

BIO 208 and 208L Human Anatomy \& Physiology I
PHY 110 Introduction to Physics
ENG 101 College Writing
General Education Math elective
b. A minimum GPA in all college work attempted on a 4.00 basis, using the following sliding scale:
$\begin{array}{ll}16-29 \text { semester hours } & 2.50 \mathrm{GPA} \\ 30-45 \text { semester hours } & 2.40 \mathrm{GPA} \\ 46 \text { or more semester hours } & 2.30 \mathrm{GPA}\end{array}$
46 or more semester hours
c. Please note that students completing BIO 208, BIO 209, and PHY 110 after summer 2007 are required to earn a grade of $C$ or better.
Successful completion of other required general education courses will result in additional points that contribute to the ranking.

## Hospital Observation

All candidates making formal application to the program are required to observe in a radiology department for a minimum of four hours. Observations may be completed at one of the program's affiliate hospitals or, for those candidates from out of the area, at a hospital near their home. Candidates are responsible for completing an "Observation Worksheet" and submitting it as part of the application.

## Technical Standards

Candidates eligible for the Radiologic Technology Program must be able to meet the following technical standards. These standards specify the skills necessary for successful completion of the program and subsequent employment as a radiologic technologist (radiographer).*

1. Sufficient visual acuity to:

* assess skin tone changes detectable in cyanotic or flushed skin
* detect color shades/tones such as shades of gray seen on radio graphs
* evaluate radiographs for quality, and
* read printed words in textbooks and on medical equipment

2. Sufficient hearing to communicate with patients and other members of the health care team, monitor patients via audio monitors, hear background sounds during equipment operations, and respond to the audible sounds of the equipment.
3. Sufficient gross and fine motor coordination to manipulate equipment and accessories, lift a minimum of 30 pounds, and to stoop, bend or promptly assist patients who become unstable.
4. Satisfactory physical strength and endurance to move immobile patients to or from a stretcher or wheelchair to the x-ray table, work with arms extended overhead (approximately 80 " from the floor), carry 30 pounds while walking, and stand in place for long periods of time.
5. Satisfactory verbal, reading, and writing skills to:

* explain radiologic procedures and direct patients during those procedures and
* Communicate in English for effective prompt interaction with patients, fellow students, faculty, and hospital personnel.

6. Satisfactory intellectual and emotional functions to:

* ensure patient safety,
* exercise independent judgment and discretion in the performance of assigned responsibilities,
* measure, calculate, reason, and evaluate as required for direct patient care,
* handle stressful situations related to procedural standards and patient care situations.

7. Must be physically free of illegal drugs and alcohol.

* Students with disabilities should declare the disability and provide verification to the Office of Disability Services so reasonable accommodations can be made.


## Admitted students must:

1. carry professional liability insurance (available through Northern Kentucky University and paid with tuition);
2. purchase appropriate professional uniforms;
3. provide own transportation to the hospital or clinic;
4. declare radiologic technology (RADA) as a major by the first day of the fall semester;
5. be immunized against hepatitis $\mathbf{B}$ and other communicable diseases;
6. provide documentation of immunizations and annual testing for tuberculosis;
7. maintain annual CPR certification. Submission of immunization and TB records is required for continuation in the program.

## Drug Screening

Clinical sites may perform random drug screening at their discretion.

## Transfer Students

Applicants who have withdrawn from another collegiate program in radiologic technology must submit an official transcript from that institution, as well as other program documents (i.e., course descriptions and/or syllabi) as requested by the NKU radiologic technology program. Transfer students must make an appointment with a program adviser to discuss transfer placement and will be considered for admission to the NKU program on an individual basis.

## Advanced Standing

Students who possess a high school diploma or a GED, have graduated from an accredited post-secondary vocational or hospital-based program in radiologic technology, and have passed the American Registry of Radiologic Technologists (ARRT) national exam will be awarded 37 semester hours toward completion of NKU professional course requirements in radiologic technology.

Students admitted into the associate degree program under the advanced standing policy will be held accountable for meeting all prevailing University and program requirements for graduation.

## Student Advising

Each student majoring in radiologic technology is assigned to a faculty advisor who will assist in developing an appropriate course of study. The student is expected to maintain frequent contact with the faculty advisor to discuss progress, performance, and career goals.

Students who are currently enrolled at NKU and who plan to apply to the Radiologic Technology Program are urged to declare pre-radiologic technology (XRAD) as their major to insure that they are appropriately advised. Pre-RAD majors may consult with their academic advisor on all issues related to course scheduling, the selective advising holds, and must be advised prior to registering for classes.

## Associate of Applied Science in Radiologic Technology

In addition to the 14 semester hours of coursework required for admission to the program, students must complete 67 semester hours of coursework for the major. The professional component includes 54 semester hours of coursework. Of that number, 14 semester hours are earned in clinical practica at the affiliate hospitals and 40 hours earned in didactic coursework at the University.
First Professional Year
Summer-Second Five-Week Session
RAD 200 Introduction to Radiography $\underline{6}$
Total$\frac{6}{6}$
Fall
RAD 208 Radiographic Procedures
3
RAD 208L Radiographic Positioning Laboratory I 1
RAD 214 Analysis of Radiographic Quality 3
RAD 214L Analysis of Radiographic Quality Laboratory 1
RAD 286 Radiographic Practicum I 3
SPE 101 Principles of Speech Communication $\underline{3}$
Total14
Spring
RAD 209 Radiographic Procedures II
RAD 209L Radiographic Positioning Laboratory II 3
RAD 216 Physical Principles of Radiographic Equipment 4
RAD 296 Radiographic Practicum II 3
Humanities Elective

Total
Second Professional Year
Summer
RAD 376 Radiographic Practicum III
BIO 209 \& 209L Human Anatomy \& Physiology II $\underline{4}$
Total 6
Fall
RAD 205 Professional Communication
3
RAD 303 Radiographic Procedures III 3
RAD 340 Radiation Biology \& Protection 3
$\begin{array}{ll}\text { RAD } 386 \text { Radiographic Practicum IV } & 3 \\ \text { Behavioral/Social Science Elective } & \underline{3}\end{array}$
$\begin{array}{ll}\text { RAD } 386 \text { Radiographic Practicum IV } & 3 \\ \text { Behavioral/Social Science Elective } & \underline{3}\end{array}$
Total 15
$\begin{array}{ll}\text { RAD } 386 \text { Radiographic Practicum IV } & 3 \\ \text { Behavioral/Social Science Elective } & \underline{3}\end{array}$
Spring
$\begin{array}{ll}\text { RAD } 334 \text { Specialized Medical Imaging } & 3 \\ \text { RAD } 350 \text { Clinical Pathology for Radiographers } & 3\end{array}$
$\begin{array}{ll}\text { RAD } 334 \text { Specialized Medical Imaging } & 3 \\ \text { RAD } 350 \text { Clinical Pathology for Radiographers } & 3\end{array}$
RAD 360 Quality Assurance
RAD 394 Radiography Seminar
RAD 396 Radiographic Practicum V 3
Total $\underline{12}$
Program Total 67
2
4
15

## RESPIRATORY CARE

Respiratory care is the allied health profession devoted to the diagnosis, treatment, and rehabilitation of patients with diseases of the respiratory system. Respiratory therapists must have a thorough understanding of normal pulmonary anatomy and physiology and of the pathology and treatment of various breathing-related disorders. They work in adult and pediatric hospitals, in some nursing homes, and for a growing number of

## 158 Northern Kentucky University

home-care companies. With the authorization of a physician, they give aerosolized medications and various special breathing treatments to patients with acute or chronic pulmonary disease. Respiratory therapists are life-support specialists, setting up artificial ventilators for patients of all ages who cannot breathe for themselves. When a cardiac arrest occurs in the hospital, therapists provide cardiopulmonary resuscitation and manual ventilation. With sophisticated equipment, they measure effectiveness of breathing and levels of oxygen and carbon dioxide in the blood. Following recognized protocols or physician's orders, they institute therapies to reduce the work of breathing and to improve ventilation and oxygenation.

The program at NKU is 5 semesters long, including summer sessions. Besides didactic, lab, and clinical training in basic respiratory care, the first year includes courses in microbiology and anatomy/physiology. The summer and the second year focus on more advanced or specialized modalities of respiratory care plus the general education courses necessary to develop an informed, broadly educated health care professional. To provide experience with patients, the program has clinical affiliations with hospitals in the northern Kentucky and greater Cincinnati area. Successful completion of the program leads to the degree of Associate of Applied Science and to eligibility for the C.R.T. and R.R.T. credentialing examinations given by the National Board for Respiratory Care. After passing the C.R.T. exam, the graduate is eligible for a Kentucky Mandatory Certificate or for licensure in another state.

## Pre-Major and Selective Admission Requirements

The applicant must follow the standard procedures for admission to the University as outlined in the Admission section of this catalog. In addition, the applicant must do the following:

The Respiratory Care Program admits up to 16 students each fall through a selective admissions process. The admission process is described below. Once an applicant has regular admission to NKU they will be considered for the professional RSP courses provided these criteria are met:
-Complete a program application form;
-Complete a hospital observation;
-Possess a GPA of 2.3/4.0 or higher on previous college coursework;
-Completion of the following courses with a C or higher: ENG 101, SPE 101, CHE 115 and;
-Completion of a criminal background check
Applications completed prior to February 15 are given priority. Conditional acceptance into the program can be given to students enrolled in any prerequisite courses by the priority application date of February 15. Successful completion of these courses must be documented at the end of the term for final program admission. Students will be notified of their admission status in writing.

Students who want to major in respiratory care but do not yet meet the above criteria should declare Pre-Respiratory Care (X-RSP) as their major, apply for acceptance into the program, and follow the advice of their RC faculty advisor. Many students take pre-requisites, general education, and science requirements before starting the professional RSP course sequence. Students must also fulfill the immunization requirements listed on the Respiratory Care Program Immunization Form and described in the Respiratory Care Program Student Handbook before they are given hospital clinical assignments, a required part of the curriculum.

## Advanced Placement for Certification School Graduates

The Respiratory Care Program recognizes learning which can be validated by testing or academic records. Certification school graduates who are accepted into the Advanced Placement Program will be granted credit hours for previous academic work in respiratory care depending upon the applicant's academic and clinical background.

## Admission Requirements for Advanced Placement

To be considered for Advanced Placement; the applicant must:

1. have graduated from a certification program accredited by the Commission on Accreditation of Allied Health Education Programs upon recommendation by the Committee on Accreditation for Respiratory Care
2. have worked at least one year as a graduate respiratory care technician or have passed the NBRC Entry Level Examination. Exception may be made to this policy upon demonstration of outstanding academic and clinical ability and interest in the field of respiratory care as determined by the Respiratory Care faculty
3. be interviewed by the Respiratory Care Program Director
4. submit three references (two from respiratory care instructors, one from a respiratory care employer)
5. have a minimum grade point average of 2.7 for his/her work in the certification program, or have passed the NBRC Entry Level Examination
6. meet the requirements for admission to Northern Kentucky University.
Interested applicants should arrange a personal interview with the Respiratory Care Program Director and complete a checklist for advanced placement. The curriculum will be determined on an individual basis and will be based on previous academic and clinical work in respiratory care as well as anticipated career goals.

## Progression

A student must achieve a grade of at least $C$ in each respiratory care and science courses in order to continue in the program. Accurate knowledge of chemistry and human anatomy and physiology is essential to the effective application of respiratory therapy. For this reason, the required science courses must be taken before or during the semester in which they are listed in the program curriculum. Science courses transferred from other institutions with a grade of less than $C$ will not be recognized as fulfilling program requirements.

## Computer Literacy

Students will demonstrate computer literacy by completing the following activities as part of the program's computer competency requirement:

1. use word-processing software such as WordPerfect or Microsoft Word for research papers;
2. do medical literature database searches using MedLine and/or CINAHL;
3. complete computer-assisted instruction assignments;
4. complete computerized clinical simulations;
5. gather information for research papers from the internet;
6. send and receive electronic mail.

## Assessment of Major

In the fifth term, as part of RSP 480 Respiratory Care Seminar, students as a group must take the Entry Level and Written Registry SelfAssessment Examinations from the National Board for Respiratory Care. The examinations (1) give students the opportunity to demonstrate a synthesis of knowledge about respiratory care, (2) help students prepare for the actual Entry Level and Registry examination, and (3) provide group examination performance information for program self-evaluation as required for accreditation.

## Associate of Applied Science in Respiratory Care

 Pre-Requisites CHE 115/115L Physiological ChemistryENG 101 College Writing
SPE 101 Principles of Speech
Total

# School of Nursing and Health Professions 159 

BIO 202 Microbiology for Health Professionals 4
BIO 202L Microbiology for Health Professionals Lab 0
BIO 208 Human Anatomy and Physiology I
BIO 208L Human Anatomy and Physiology Lab 4
BIO 08 O
RSP 201 Fundamentals of Respiratory Care 4
RSP 201L Patient Assessment Lab 1
RSP 286 Clinical Practicum I $\underline{2}$
Total 15
2nd Semester, Spring
NRS 105 Pharmacology
BIO 209/209L Human Anatomy and Physiology II 4
RSP 230 Respiratory Physiology 3
RSP 220 Ventilatory Support 3
RSP 220L Respiratory Laboratory II 1
RSP 296 Clinical Practicum II 2
Total 15
3rd Semester, Summer
Math Elective
3
RSP 310/310L Artificial Ventilation 4
RSP 386 Clinical Practicum III $\underline{3}$ Total 10
4th Semester, Fall
RSP 331 Cardiopulmonary Diagnostics 2
RSP 350 Chest Disease 3
RSP 362 Prenatal-Pediatric Respiratory Care 3

RSP 396 Clinical Practicum IV $\underline{3}$
Total
5th Semester, Spring
RSP 340 Pulmonary Rehabilitation 2
RSP 480 Respiratory Care Seminar 1
RSP 486 Clinical Practicum V 3
General Education Requirement 6
Total $\underline{13}$
Program Total 74

## INTERNATIONAL PROGRAMS

## Michael Klembara, director

The Office of International Programs in FH 301 coordinates all education abroad programs at NKU. Through membership in several consortia, its own exchange agreements with foreign universities, and independently designed programs, NKU provides its students with a variety of opportunities for education throughout the world. Academic credit can be earned for courses taken through these programs; students should consult with their advisors to ensure that courses taken abroad will count toward their general studies and/or major requirements.

Students may participate in a wide range of courses and programs in English-speaking regions available through NKU's membership in the Cooperative Center for Study Abroad (CCSA). CCSA develops and coordinates short-term programs in Australia, Dublin, Hong Kong, India and London in the interim between semesters in late December and early January; summer programs in Australia, Belize, England, Ghana, Ireland, Jamaica and Scotland; and a fall semester in England. Internships are also available in London, England; Dublin, Ireland; and Australia.


Study in Europe, Asia, Latin America and South America is available through the Kentucky Institute for International Studies (KIIS). KIIS sponsors summer programs in Argentina, Austria, Brazil, China, Costa Rica, Denmark, Ecuador, France, Germany, Greece, Italy, Japan, Mexico, Prague, Turkey, and Spain. Fall semester programs are available in Morelia, Mexico, and Regensburg, Germany. A spring semester program is available in Segovia, Spain, and Dijon, France.



Students and faculty exchanges are offered with the following institutions: Aarhus School of Business in Aarhus, Denmark; Gifu University in Gifu, Japan; Ludwig Maximilians University in Munich, Germany; University of León in León, Spain; the Peoples' Friendship University of Russia in Moscow, Russia; Glasgow Caledonian University in Glasgow, Scotland; the Universidad Autonomous del Estado de Morelos in Cuernavaca, Mexico; the Universidad Autonoma de Zacatecas, Mexico; the Universidad Jesuita de Guadalajara: ITESO, Mexico; Hansung University in Seoul, Korea; the Universidad Nacional in Heredia, Costa Rica; the University of Caen Basse-Normandie in Caen, France; and Nanzan University in Nagoya, Japan. The office also provides information on numerous international scholarships including the NKU International Study Scholarship, Fulbright, Rhodes, National Security Education Program (NSEP), and British Marshall Scholarship. In addition, both CCSA and KIIS offer individual scholarships.

Information about opportunities abroad is available from the Office of International Programs in FH 301, 859-572-6523 and at www.nku.edu/~oip.

## UNIVERSITY PROGRAMS

## MISSION STATEMENT

The offices of University Programs within the Academic Affairs unit at Northern Kentucky University will provide University-wide leadership to cultivate an environment to optimize student success across the organizational boundaries of admission, orientation and placement processes, registration, advising, academic support programming, curricula improvement, career planning, and transitioning from the University. The offices will ensure that the University provides proactive and comprehensive resources to enhance academic, social and personal development of all students. The offices will also develop innovative ways to encourage an increased number of students to take advantage of the resources available.

## Student Success Objectives

- From the inception of the matriculation process, educate students and parents in an effort to provide them with a working knowledge of financial, academic, time and ethical requirements for college success.
- Foster a more open academic community that supports students in their pursuit of knowledge.
- Work across organizational boundaries to build a challenging, yet supportive, caring, cohesive and inclusive learning environment conducive to the cultivation of students engagement and
committed service within the University and in the world beyond Northern Kentucky University.
- Assist academic support units in the creation and sustaining of dynamic learning strategies to enhance academic success
- Create and maintain proactive support systems that facilitate the student's management of their academic, social and personal life while in college.
- Initiate and promote the development of innovative programs and services for students by the offices and departments that conduct student success programs and with other academic and administrative units within the University community.
- Work with Admissions to support their efforts to recruit diverse students.
- Collaborate with deans, department heads, and faculty to recruit women and faculty of color. Develop and maintain innovative programs and services to recruit and retain students, faculty and staff of color.
- Promote an environment to ensure that students are properly served within the University and that systems are readily available to manage student concerns and resolve grievances.


## Academic Advising Resource Center

David Emery, director<br>Mary Huening, assistant director

The Academic Advising Resource Center (AARC) provides academic advising services for some undeclared and all University Studies students at NKU. AARC advisers assist these students to make well informed, timely decisions about selecting appropriate courses and programs of study.

## Undeclared Students

Many entering students elect to be Undeclared rather than select a major. Some undeclared students may feel that they need some time to explore possible areas of interest, make appropriate choices about majors, and schedule courses preparing them for these programs. Other undeclared students want advice about which programs might be best suited to their academic strengths and weaknesses, personal interests, and career objectives. AARC advises only undeclared students whose academic interests cannot be narrowed to a specific college. Undeclared students who have focused their major choice(s) within a specific college can be advised in the College of Arts and Sciences, College of Business, College of Education and Human Services, College of Informatics, or the School of Nursing and Health Professions.

## University Studies Students

NKU has developed a special program for entering students who have not yet fulfilled the University's pre-college curriculum requirements. Students who have academic needs as defined by their admission status are classified as University Studies students and are advised by AARC. AARC advisers assist these students with timely completion of pre-college
curriculum requirements and discuss with them avenues for academic success.

## Advising Services

All students electing to be undeclared and all University Studies students must meet formally with an academic adviser in AARC each semester before registering for classes. During advising appointments, AARC advisers provide academic advising that is sensitive to students' individual needs. Specifically, AARC advisers assist students in the following ways:

1. Discuss students' academic progress.
2. Provide current curricular information on pre-college curriculum, general education, and major or minor course requirements.
3. Clarify University policies and procedures.
4. Help students learn effective decision-making skills for choosing majors.
5. Offer proactive academic counseling for students experiencing academic difficulties.
6. Assist in course selection and scheduling.
7. Make referrals to appropriate university faculty, staff, and services.
Academic advising is a process of shared responsibility between the student and the adviser that assists students in achieving their maximum educational potentials. Quality academic advising depends on active student participation in the process. To realize the most from their advising, students should come to advising sessions prepared with information and questions for their advisors.

The Academic Advising Resource Center, Founders Hall (FH) 405A, 859-572-6900, is open from 8:15 a.m. to 4:30 p.m. Monday through Friday with additional availability till 6:00 p.m. Monday and Thursday fall and spring semesters. Visit AARC’s web page at www.nku.edu/~aarc.

# First Year Programs 

Peg Adams, interim director<br>Jeanne Pettit, associate director<br>Jen LaMothe, coordinator/lecturer

## FRESHMAN SPECIALISTS

Suzanne DeLuca, History
Heather Hatchett, Psychology
Darrin McMillen, Literature and Language
Sarah Schroeder, Communication

## LEARNING COMMUNITY PROGRAM

A Learning Community is a small group of NKU students who take two or three popular courses together. Learning Community students meet new people, make friends, form study groups, participate in class discussions, experience a deeper level of learning, and get to know faculty. Research has shown that the more connections students make to the university, the better they do in school and the more they enjoy their college experience.

## Course Placement

In a Learning Community, the same group of about 25 students will be placed in two or three classes together. Usually one of these classes will consist entirely of the Learning Community and, in most cases, one will be a large, lecture-based class.

## Scheduling

Learning Community classes meet on the same day of the week. Enrolling in a Learning Community guarantees students a spot in all of the Learning Community classes.

## Eligibility

All freshmen are eligible toi Leurning Camriuntins, ت̈gurdtess of admission status.

## Courses

Learning Communities feature a wide range of the classes freshmen take most often. Please see the current Schedule of Classes on Norse Express for more information.

For more information about Learning Communities, contact the Office of First-Year Programs, FH 231 or call 859-572-5913.

## UNV 101 (An Orientation to College and Beyond)

This course is designed to help students make a successful transition to university life, illuminating the importance of learning processes that occur outside the classroom and an overview of resources available to facilitate student success in the classroom. UNV 101 provides students with essential information about University policies, rules, procedures. and resources. UNV 101 classes include work on time management, college study skills, choosing a major and career, and using the NKU library. Students attend several University activities and events. Classes introduce students to University offices and discuss topics like safer dating, multiculturalism, and drug and alcohol abuse. Students are required to attend class and to interact with their instructor and classmates. Throughout the course, students are strongly encouraged to take responsibility for their own success in the learning process. Students will learn skills essential both to a positive transition to college and to future transitions in their lives.

## UNV 101 Outcomes:

1. Students will demonstrate responsibility for their own learning both in and out of the classroom.
2. Students will exhibit academic, personal and social "survival skills" essential to success in college and beyond.
3. Students will become familiar with University procedures and begin to develop proaficiency using campus resources.
4. Students will experience a supportive community that will assist them in their transition to college.
5. Students will practice and develop written, oral and non-verbal communication skills.
6. Students will use computer tools such as email, the NKU Homepage, and electornic library cources.
7. .Students will learn the process for selecting a major and exploring career options.
8. Students will attend co-curricular events and cultural activities that enhance classroom instruction.
9. Students will gain understanding of and sensitivity to differences such as race, culture, religion, sexual orientation and physical ability as reflected in our University community.
10. Students will know mission, traditions and history of Northern Kentucky University.

## Course Characteristics

UNV 101 is a 3-semester-hour course generally limited to freshmen or transfer students. It does not fulfill general education requirements but counts as an elective that may be applied toward graduation. Based on student performance, the grade of $A, B, C, D$, or $F$ will be awarded upon completion of the course. The grade in UNV 101 is computed in a student's grade point average.

## Instructors

UNV 101 is taught by a specially trained group of instructors who come from various areas and disciplines across campus. Some sections may be team-taught by two instructors.

## Special Sections of UNV 101

Students may choose from different types of UNV 101 sections: (1) "regular" sections open to all new students; or (2) special sections that, in addition to the standard UNV 101 curriculum, are designed to meet the needs of particular student populations such as African-American, undeclared/undecided, non-traditional, and international students. Some UNV 101 sections focus on specific majors and/or academic interests. Approximately half of the UNV 101 sections are offered within learning communities.

## Learning Community/UNV 101 Sections

Some UNV 101 sections will be included in Learning Communities. Learning Community UNV 101 courses help new students build stronger connections with each other and with the campus and provide opportunities for students in these special UNV 101 classes to form study groups and to attend campus activities together.

## UNV 301 (University 101 Teaching Internship)

Assisting in UNV 101 gives UNV 301 students an opportunity to develop abilities they will need for work and/or attend graduate school. Moreover, they develop these abilities in the university - a setting - in which they have become "experts." UNV 301 students sharpen their ability to facilitate and speak in front of groups, develop leadership skills, and gain classroom teaching experience.

UNV 301 students are committed to helping NKU freshmen taking UNV 101 and Learning Communities cope with a new environment. Students taking 301 are expected to attend UNV 101 classes, meet frequently with the UNV 101 instructor they assist, prepare and teach a minimum of 3 UNV 101 topics, facilitate small and large group discussions, and mentor freshmen in UNV 101 and Learning Communities.

UNV 301 students will process their experiences as they participate in regular classroom meetings, contribute to online discussions, read materials relevant to teaching freshmen, and submit written work.

## Course Characteristics

UNV 301 is a 3-semester hour course limited to students who have earned 60 or more credit hours and have earned a 3.0 GPA. Enrollment in the course is selective and requires instructor consent. The course does not fulfill general education requirements but counts as an elective that may be applied toward graduation. Based on student performance, the grade of A, $B, C, D$ or $F$ will be awarded upon completion of the course. The grade in UNV 301 is computed in a student's grade point average.

## Instructor

UNV 301 is taught by a seasoned UNV 101 instructor who guides the mentorship process. The 301 instructor facilitates relationship building between the UNV 101 instructors, 301 students, and UNV 101 students.

## Developmental Education

Diane Williams, director

## COORDINATORS

Wanda Crawford, Developmental Literacy
Paul Ellis, Writing Center and Academic Tutoring
Karen Jenkins, Supplemental Instruction
Beth Wells, Math Center
Diane WIlliams, Developmental Mathematics

## FACULTY

Janalynn Anderson, Janis Broering, Patricia Connelly, Patricia Fairbanks, Barbara Hamilton, Gretchen Kauscher, Elizabeth McMillan-McCartney, Dempsy Smith, Judith Taylor

The Learning Assistance Programs provides academic support to all NKU students through its tutoring programs and developmental courses. The Learning Assistance Center is open from 8:15 a.m. to 6:00 p.m. Monday through Thursday and from 8:15 a.m. to 3:00 p.m. on Fridays. Students may make tutoring appointments in person or online via http://tutortrac.nku.edu. Students should visit FH 209 or call 859-572-5475 for more information.

## ACADEMIC SUPPORT (TUTORING) PROGRAMS

Academic Tutoring provides FREE assistance and support for students who want or need to comprehend more fully or better understand the course content and materials of specific 100, 200, and some higher-level courses. Visit FH 209 or call 859-572-5475 to learn how to make an appointment.

The Math Center provides FREE assistance and support for students taking math courses. After scheduling an appointment, students should bring with them a question, problem or assignment - plus any other relevant materials. Visit FH 201 or call 859-572-5779 to learn how to schedule an appointment.

The Writing Center provides FREE assistance and support for students with college writing tasks assigned in any course: essays, reports, research papers, etc. Writing Center consultants can guide and advise students through the entire writing process. Visit FH 209 or call 859-572-5475 to learn how to schedule an appointment.

Supplemental Instruction (SI) provides FREE peer collaborative review sessions for a few sections of difficult and challenging courses. SI leaders, students who took the class before and earned an A grade, attend all classes again and conduct the weekly review sessions to help students with mastering course content as well as developing learning strategies that can be applied to other courses. Students are encouraged to attend review sessions often.

Structured Learning Assistance (SLA) provides FREE peer collaborative workshops for students enrolled in courses with traditionally high failure and withdrawal rates. All students who enroll in a SLA course are required to attend all SLA workshops until the first exam/quiz and thereafter only when their grade in the class falls below a $C$ average. Students must continue to attend all SLA workshops until their grade improves to a
$C$ average or higher. However, all students are encouraged to attend workshops often.

## Becoming an Learning Assistance Programs Tutor or Consultant

Sophomore, junior, and senior students with superior academic achievement are invited to apply to the Learning Assistance Programs (LAP) to become paid Academic tutors, Math Center tutors, or Writing Center consultants. LAP student employees normally work 2-10 hours per week.

## DEVELOPMENTAL COURSEWORK

The Developmental Mathematics and Developmental Literacy Programs help underprepared students develop the skills and attitudes necessary for success in their college-level courses. The programs allow NKU to keep its standards high and at the same time make an NKU degree accessible to many students who do not meet the standards for regular admission status. Placement into these courses is by ACT scores, SAT scores, COMPASS scores, high school records, and/or challenge testing. See the chart labelled " Test Scores, Course Assignments, and Challenge Tests" page 13or more details.

## Writing Workshop (ENG 090)

Writing Workshop offers practice and instruction in writing for students needing additional preparation for ENG 101. The course focuses on the activities writers do and the decisions writers make: selecting topics, purposes, and forms; determining when and how to revise; and establishing when a piece of writing can be considered "finished."

## Learning Assistance (LAP 090)

Learning Assistance, a 1 -semester-hour pass/fail course, offers additional instruction for selected developmental level (under 100) courses.

## Reading Workshop (LAP 091)

Reading Workshop offers students practice and instruction in reading comprehension and reading appreciation. The course guides students in literate behaviors: book selection, reading strategies, and responding creatively and critically to readings.

## Critical Reading (LAP 110)

Critical Reading is designed to sharpen students’ critical reading and thinking abilities. It is especially recommended for students desiring additional instruction for the considerable reading demands of college-level courses.

## Bookscapes (LAP 210)

Introduction to the world of contemporary tradebooks (books sold in regular bookstores, books that are NOT school textbooks). Students read these books and learn how to engage in in-depth discussions about them in an egalitarian, book-discussion-club atmosphere.

## Mathematics Assistance (MAH 080)

This is a workshop course, paired with selected developmental courses, that provides additional instruction on topics from the paired cours

## Basic Mathematical Skills (MAH 090)

This is a pre-algebra course covering basic math skills and skills necessary for success in algebra.

## Beginning Algebra (MAH 095)

This is an elementary algebra course that assumes students have prealgebra skills, but have not mastered basic algebra concepts.

## Elementary Geometry (MAH 091)

This is an introductory course covering basic geometric concepts, with emphasis on developing inductive and deductive reasoning skills. This course is recommended for those students who want to be elementary or middle school educators and need to strengthen their geometry background.

## Intermediate Algebra (MAH 099)

This is a second algebra course providing students with the opportunity to develop the competencies to be successful in a college-level mathematics course.

## COURSE ABSENTEE POLICY

Any student in a developmental mathematics class who misses more than the equivalent of one week of class during the first three weeks of the semester can be dropped from the class.

## NKU EXTENDED PROGRAMS

Opportunities for an NKU college education are extended through off-campus learning sites and distance learning.

For more information contact:
NKU Educational Outreach
Founders Hall, FH 305A
Telephone: 859-572-1500
E-mail: edoutreach@nku.edu
Web: http://edoutreach.nku.edu

## OFF-CAMPUS LEARNING SITES

## NKU Grant County Center (Williamstown, KY):

The NKU Grant Count Center provides access to general education and pre-major programs, as well as an associate degree in liberal studies. All NKU student may take courses at the center. The center features smart-classroom technology and is conveniently located minutes from I75 on US 25 (Main Street) in Williamstown Kentucky. To see the current list of courses, visit http://express.nku.edu and select "GR-Grant County Center" from the Campus/Site dropdown menu. Call the center at 859-824-3600.

## NKU Covington Campus

NKU's Covington Campus, located at 1401 Dixie Highway, provides general education courses at times convenient to college students of all ages. To select general education courses offered on the Covington Campus, visit http://express.nku.edu and select "CV-Covington Campus" from the Campus/Site dropdown menu.

The campus also offers the PACE program (Program for Adult Centered Education). PACE is a structured yet flexible curriculum that allows working adult students to complete their educational goals in a timely manner. PACE is a selective admission program open only to students meeting specific admission program requirements. For information, go to http://PACE.nku.edu.

## Prior Learning/Portfolio Program:

Many working adults seek credit for prior learning gained through employment, non-collegiate training, or community service through the Prior Learning/Portfolio program. To determine if this may be a viable option for you, call 859-572-1500.

## School-Based Scholars Program:

NKU offers college classes at a variety of area high schools, enabling eligible students to complete college credits prior to high school graduation. To learn more about the criteria for admission, go to http:// edoutreach.nku.edu and click on the School-Based Scholars link or call 859-572-1500.

## Urban Learning Center (Covington, KY):

NKU partners with the Urban Learning Center (ULC), which provides post-secondary opportunities for economically disadvantaged inner-city residents, by offering entry level courses and assistance in making the transition to college. Classes are held at ULC locations. Contact the Urban Learning Center at 859-491-2220 for more information.

## DISTANCE LEARNING

Distance Education uses technology to create a learning environment independent of time and location.

## Online Programs and Classes

NKU offers the following $100 \%$ online bachelor's, masters and certificate programs:

## Undergraduate Programs

Bachelor of Arts in Organizational Leadership
Bachelor of Arts in Health Science
Bachelor of Science in Nursing (for RN's)
Certificates
Certificate in Business Informatics
Post-Bachelor Certificate in Entrepreneurship
Graduate Programs
Master of Arts in Education
Master of Arts in Instructional Leadership
Master of Science in Nursing
Post-Masters Certification in Nursing
Nurse Practitioner Advancement
Endorsement in Gifted and Talented Education
Online or Web-based classes are taught using a course management system like Blackboard which allows students to communicate with instructors and classmates via the Internet. There is an online per credit hour fee for all web-based sections designated as follows:

- $\quad W$ sections are courses offered independently of online programs of study and are open to all eligible students.
- $\quad J$ sections are part of an online program and open to all eligible on-campus students as space permits.
- I sections are reserved for students who have declared an online program of study.


## Telecourses

Telecourses have a $T$ prefix and require student to view programs via a DVD/CD, video streaming or public television (Kentucky Educational Television); then complete assignments using a textbook and study guide with minimum on-campus requirements.

## Kentucky Virtual University (KYVC)

The Kentucky Virtual Campus is the state clearinghouse for webbased college courses taught by universities and colleges throughout the state. NKU students wishing to take courses listed on the KYVC site should confirm transferability of credit with their advisor first and then follow the instructions found at http://www.kyvc.org regarding application and registration.

For more information, go to http://DL.NKU.edu or call Educational Outreach at 859-572-1500.

## COURSE DESCRIPTIONS

NOTE: Northern Kentucky University has established abbreviations for its various disciplines. These abbreviations, which are printed below the name of each discipline in the following course descriptions, should be used in preparing course schedules and at other times when referring to specific courses. Following course titles are three figures in parentheses. The first of these indicates the number of lecture hours in the course; the second, the number of laboratory hours; and the third, the number of semester hours of credit.

The University reserves the right to withdraw or modify courses of instruction at any time.

## Accounting <br> ACC

ACC 101 Introduction to Accounting (3,0,3) Recording, classifying, and posting transactions; preparing journals, ledgers, and financial statements; accounting for payrolls and various balance sheet accounts. Can be substituted for ACC 200 only by students who are completing the associate degree program. Not open to students pursuing a bachelor's degree in a business discipline.

ACC 150 Overview of Accounting $(3,0,3)$ Introduction to financial information generated by typical business organizations, with special emphasis on the use and interpretation of this information in managerial and financial decision-making processes by entrepreneurs. Enrollment priority given to ENTP minors. May not be substituted for ACC 200. Not open to students with credit for ACC 200 or ACC 201. Same as ENTP 150.

ACC 200 Principles of Accounting I—Financial (3,0,3) Preparation of primary financial statements: income statement, balance sheet, and statement of funds. PREREQ: sophomore standing; completion of one college level mathematics course; completion of computer competence requirement as determined by student's major, or completion of INF 105.

ACC 201 Principles of Accounting II—Managerial (3,0,3) Accounting concepts for internal use of management in planning and control of operations. PREREQ: ACC 200 and sophomore standing.

ACC 202 Accounting Laboratory ( $0,2,1$ ) Computerized lab focusing on technical accounting skills. PREREQ: sophomore standing and completion of a collegelevel mathematics course and ACC 200 with a C or better.

ACC 300 Intermediate Accounting I (3,0,3) Financial accounting theory and practice in determination of income and valuation of assets and equities for external reporting; official pronouncements on generally accepted accounting principles; alternatives to these principles; accounting cycle, financial assets (cash, marketable securities, and receivables), inventories, and prepayments. Assessment test is given. PREREQ: ACC 200, ACC 201, and ACC 202 with grades of $C$ or better, junior standing.

ACC 301 Intermediate Accounting II $(3,0,3)$ Financial accounting theory and practice in determination of income and valuation of assets and equities for external reporting; official pronouncements on generally accepted accounting principles; alternatives to these principles; operating assets (tangible, intangible, and natural resources), long-term investments, current liabilities, long-term debt, owners' equity, and earnings per share. PREREQ: junior standing; ACC 300 with a $C$ or better; MAT112.

ACC 310 Accounting Information Systems ( $3,0,3$ ) Study of complex accounting systems including the steps of the accounting cycle from documents through the preparation of financial statements within the revenue, expenditure, conversion, and financial reporting cycles, the importance of internal controls and the impact of technology on the accounting system. The nature of accounting and business ethics as related to collecting, reporting, and auditing accounting data. Open only to students certified as majoring in business or by consent of instructor. PREREQ: ACC 200, ACC 201, ACC 202 with a $C$ or better; INF 101; MAT 112; junior standing.

ACC 320 Tax Planning $(3,0,3)$ Impact of income tax on business entities, including corporations, S corporations, partnerships, limited liability companies and sole proprietors; gross income deductions, accounting periods, accounting methods and property transactions. PREREQ: junior standing; declared major in any bachelor's program; ACC 200 and ACC 201 with grade of $C$ or better and BUS 230.

ACC 330 Fraud Examination $(3,0,3)$ The principles and methodology of fraud detection and deterrence. The course includes such topics as skimming, cash larceny, check tampering, register disbursement schemes, billing schemes, payroll and expense reimbursement schemes, non-cash misappropriation, corruption, accounting principles and fraud, fraudulent financial statements, and interviewing witnesses. PREREQ: ACC 200 and ACC 201 with a grade of C or better.

ACC 350 Management Cost Accounting I (3,0,3) Cost accounting concepts, techniques, and procedures relating to financial reporting; decision-making and responsibility accounting to help management plan and control operations. PREREQ: junior standing, and STA 212, ACC 200-201-202 with grade of $C$ or better.

ACC 394 Topics in Accounting (3,0,3) Specialized topics of faculty and student interest. Topics vary and prerequisites may be specified depending upon topics. May be taken twice for elective credit if topics differ. PREREQ: junior standing; ACC 200 and ACC 201 with grades of $C$ or better.

ACC 396 Internship: Accounting (0,10-19,1-2) Supervised paid or unpaid work experience related to accounting and coordinated by employer in conjunction with a member of accounting faculty. May be repeated to a total of 6 semester hours. Graded pass/fail. PREREQ: completion of ACC 200 and ACC 201 with grades of $C$ or better.

ACC 400 Auditing $(3,0,3)$ Principles, standards, and procedures in conduct of an audit by CPA; functions and responsibilities; internal control; statistical sampling, audit report; special problems of auditing electronic data-processing systems; account verification; ethics. Open only to students certified as majoring in business or by consent of instructor. Assessment test is given. PREREQ: ACC 301 and ACC 310 and ACC 350 with grades of $C$ or better; junior standing.

ACC 420 Advanced Tax Planning $(3,0,3)$ Federal tax consequences of corporate redemptions, liquidations, reorganizations, consolidated tax returns; partnership distributions and terminations; multijurisdictional considerations, international and multistate taxation; individual tax planning, deferred compensation, retirement planning, estate and gift taxation, succession planning. PREREQ: junior standing; certified major in business; ACC 320 with grade of $C$ or better.

ACC 430 Accounting for Non-Profit Institutions (3,0,3) Problems of control of funds and other assets; accounting classifications and relationships; planning, performance measurement, reporting, and auditing from the viewpoint of the non-profit (including governmental) organization. Open only to students certified as majoring in business or by consent of instructor. PREREQ: ACC 301 with a $C$ or better; junior standing and certified major in business.

ACC 450 Management Cost Accounting II $(3,0,3)$ Continuation of ACC 350. Application of quantitative techniques (e.g., statistical and O.R. models) to managerial problems; behavioral implications of budgetary control systems. Open only to students certified as majoring in business or by consent of instructor. PREREQ: ACC 310 and ACC 350 with grades of $C$ or better; certified major in business.

ACC 499 Independent Study: Accounting (3,0,3) Independent project or intensive study/research with faculty guidance. Open only to students certified as majoring in business or by consent of instructor. PREREQ: senior standing and consent of instructor.

ACC 500 Auditing $(3,0,3)$ Principles, standards, and procedures in conduct of an audit by CPA; functions and responsibilities; internal control; statistical sampling, audit report; special problems of auditing electronic data-processing sys-
tems; account verification; ethics. Open only to students certified as majoring in business or by consent of instructor. Assessment test is given. PREREQ ACC 600.

ACC 520 Tax Planning $(3,0,3)$ Impact of income tax on business entities, including corporations, S corporations, partnerships, limited liability companies and sole proprietors; gross income deductions, accounting periods, accounting methods and property transactions. PREREQ: Admission to the MACC program, ACC 200 and ACC 201, or permission of MACC director.

## Afro-American Studies <br> AFR

AFR 100 Introduction to Afro-American Studies (3,0,3) Origins, relevance, and scope of Afro-American studies, distinguishing the Afro-centric orientation by investigating the seven core subject areas of Afro-American studies; contributions and conditions of black women. A general education course (social sciences, race/gender perspective or non-western perspective).

AFR 494 Topics: Afro American Studies (1-3 sem. hrs) Study of selected topics. Subfields will be chosen in keeping with the interest of the instructor in charge and will be listed in the Schedule of Classes. May be repeated for credit when topics vary. PREREQ: Consent of instructor.

## Anthropology <br> ANT

ANT 100 Cultural Anthropology (3,0,3) Definition and nature of culture, its content and structure (e.g., kinship, politics, and religion); basic field methods; emphasis on non-western cultures. A general education course (behavioral sciences or non-western).

ANT 110 Introduction to Archaeology $(3,0,3)$ Change and development of prehistoric cultures from 3 million B.C. to early civilizations; selected Old World and New World cultures. Basic archaeological methods. A general education course (behavioral science).

ANT 201 World Cultures $(3,0,3)$ Survey of world cultures, primarily non-literate, using various anthropological approaches; development from simple to more complex cultural systems. A general education course (behavioral sciences or non-western perspective).

ANT 202 Introduction to Physical Anthropology (3,0,3) Human genetics, primate behavior, humankind as biological organisms, relation of humans to culture, human evolution. COREQ: ANT 202L.

ANT 202L Introduction to Physical Anthropology Laboratory (0,2,1) Laboratory focusing on human genetics, primate behavior, and human osteology. COREQ: ANT 202.

ANT 210 Introduction to Archaeological Method and Theory (3,0,3) Methods of archaeological excavation and analysis; how archaeologists interpret excavated material and reconstruct prehistoric ways of life.

ANT 215 Archaeological Field Methods (3-4 sem. hrs.) Archaeological excavation methods; excavation at an archaeological site; excavation, recording, mapping, analysis. Summer. Three semester hours if taught during intersession; 4, if taught during 5-week session.

ANT 230 North American Indians $(3,0,3)$ Origin; traditional ways of life; current position in American society. A general education course (behavioral sciences or non-western perspective).

ANT 231 Modern American Indians $(3,0,3)$ Current problems faced by Indian populations in North America; history of Indian-white and Indian-black relations; relations to federal government. A general education course (behavioral sciences or non-western perspective).

ANT 240 Peoples of Africa $(3,0,3)$ Archaeology, geography, history, and cultures of Sub-Saharan Africa to the present; culture area concept. A general education course (behavioral sciences or non-western perspective). Same as SOC 240.

ANT 245 Peoples of Latin America (3,0,3) Contemporary cultures of Latin America; problems of contact, colonization, acculturation, development of the
area cultural tradition, and contemporary urbanization. A general education course (behavioral sciences or non-western perspective). Same as SOC 245.

ANT 270 Native Australia \& Oceania (3,0,3) Origin; traditional ways of life of native peoples of Australia, Polynesia, Micronesia, and Melanesia; modern conditions. A general education course (behavioral sciences or non-western perspective).

ANT 273 Race, Gender and Culture $(3,0,3)$ Race and gender as complex historical and cultural constructs; focus on the legacy of slavery involving racialized, sexualized, gendered and class-based identities. Develop understanding of contemporary racial/gender identities and interrelationships. A general education course (behavioral science or race/gender).

ANT 275 Language and Culture (3,0,3) Methods and case studies in anthropological linguistics; relationship between language and culture; language structure. PREREQ: ANT 100.

ANT 294 Topics: Studies in Anthropology (3,0,3) Selected topics in anthropology and archaeology taught at the sophomore level. PREREQ: consent of instructor. A general education course (behavioral science).

ANT 301 World Patterns of Race and Ethnicity $(3,0,3)$ Patterns of inter-group relations in multi-ethnic societies (e.g., South Africa, Brazil, Israel, and Northern Ireland); similarities and differences between these and U.S. Same as SOC 301. PREREQ: ANT 100 or SOC 100 or consent of instructor.

ANT 307 Museum Methods $(2,2,3)$ Actual work experience in museums, stressing an anthropological and research orientation; history of museums and their role in the development of anthropology.

ANT 308 Cultural Resource Management (3,0,3) Practical, ethical, and legal issues surrounding the preservation of prehistoric and historic cultural resources on the local, state and national level. How to locate projects, make proposals and conduct CRM surveys; writing, submitting and reviewing reports; maintaining good community relations. PREREQ: ANT 210.

ANT 310 African Arts $(3,0,3)$ Survey of African arts in their cultural context, including wood and metal sculpture, pottery, textiles, decorative arts, architecture, music, dance, and other arts. A general education course (behavioral science or non-western). PREEREQ: 3 credit hours of in anthropology or art.

ANT 312 Social Organization $(3,0,3)$ Study of "primitive," peasant, and urban social organization; associations based on kinship, ethnic affiliation, age, and gender. PREREQ: ANT 100.

ANT 317 Ecological Anthropology (3,0,3) Examines the modern contributions of cultural ecology, ethnecology, and evolutionary ecology towards understanding ecosystemic and cultural connections between human populations and their environment. PREREQ: ANT 100.

ANT 318 Prehistoric Ecology $(3,0,3)$ This course examines human adaptations to local environments from prehistory to early civilizations from an anthropological and archaeological perspective; examines environmental issues using case studies including hunter-gather societies and early farmers, to early civilizations and urbanization. PREREQ: 3 semester hours of anthropology or consent of instructor.

ANT 320 Religion and Culture $(3,0,3)$ Anthropological approaches to the study of religion, religious beliefs, and practices of selected non-western and western cultures. PREREQ: ANT 100 or ANT 201.

ANT 325 Applied Anthropology $(3,0,3)$ Practical uses to which anthropological methods and theory can be put towards solving contemporary social and cultural problems through research, policy development, and administration. Students will examine cross-cultural case studies from specialties within applied anthropology and complete a career-oriented research project. PREREQ: ANT100.

ANT 330 Women, Gender and Culture, a Global Perspective (3,0,3) Examines the position of women in various cultures around the world: considers women's roles in local and world subsistence, economic, political, family, religious, and other institutions; examines the cultural construction of gender; seeks explana-
tions for women's low status and women's struggle against loss of power. PREREQ: junior standing.

ANT 335 Advanced Archaeological Field Methods (3-4 sem. hrs.) Further experience in excavation, recording, mapping; excavation at an archaeological site. Summer. Three semester hours if taught during intersession; 4 if taught during 5-week session. PREREQ: ANT 215.

ANT 336 Historical Archaeology (3,0,3) Provides an overview of Historical Archaeology as a developing and changing discipline, as practiced in the United States. Includes research on diverse minority groups, cemeteries, landscape, industrial, and urban archaeology, and studies the influences of European settlement on the Americas. PREREQ: 3 hours of anthropology or history.

ANT 339 Introduction to Ethnographic Research (1,0,1) Intro to principles of ethnographic research; readings; design of an ethnographic project. PREREQ: ANT 100, junior standing or consent of instructor.

ANT 340 Ethnographic Methods $(3,0,3)$ Each student conducts an individual ethnographic research project to be completed during the semester. COREQ: ANT 339. PREREQ: ANT 100, junior standing or consent of instructor.

ANT 342 Quantitative Methods in Anthropology $(3,2,4)$ Theoretical foundations and methods used to conduct quantitative analysis in anthropology. This course includes a laboratory component where students practice methods learned in lecture. Topics include: research design, ethics, human subjects protection, research design sampling, GIS/Mapping, interviewing, questionnaires, and computer aided data analysis. PREREQ: ANT 100 and STA 205.

ANT 345 Environmental Anthropology (3,0,3) Sociocultural patterns of humanenvironmental interaction, applied research on and policy solutions to environmental problems in the western and non-western worlds.

ANT 350 North American Archaeology (3,0,3) Prehistoric cultures and cultural developments in the United States and Canada from the first settlement to late prehistoric times; regional cultural developments. PREREQ: ANT 100 or ANT 110 or ANT 210.

ANT 352 Archeology of Mesoamerica $(3,0,3)$ Major pre-Colombian cultures of Mexico and Central America from earliest times until the Spanish conquest (Aztecs, Mayas, etc.); rise of towns, ceremonial centers, cities, states, and empires; development and elaboration of area and regional cultural traditions; selected problems in Mesoamerican prehistory. PREREQ: 3 hours of anthropology.

ANT 355 Archaeological Laboratory Analysis (2,2,3) Follow-up study of excavated materials; artifact description, measurement, and analysis by students. PREREQ: ANT 210.

ANT 358 Art and Culture $(3,0,3)$ Functions of the arts in culture and relationship of art to other aspects of culture; arts of Pacific, African, native North American, and other cultures. PREREQ: 3 semester hours in anthropology or art.

ANT 360 Indians of Mexico and Guatemala $(3,0,3)$ Aboriginal cultures of Mexico and Guatemala; economic, social, political, and religious aspects of traditional and contemporary Indian cultures. PREREQ: ANT 100 or ANT 201.

ANT 363 Language and Thought $(3,0,3)$ Examines how the content of thought or knowledge is created, organized, and distributed in human communities. Topics include taxonomies, schemas, and models of cultural knowledge. PREREQ: ANT 100 and junior standing.

ANT 370 Celtic Europe $(3,0,3)$ Ethnographic examination of Celtic Europe. Brief look at Pre-Celtic Europe followed by appearance of Celts, earliest written descriptions of Keltoi, invasion of the insular Celts, linguistic differences between Celts. Description of Celtic culture from written and folkloristic sources, and modern ethnographies leads into Celtic influence in modern global economy. PREREQ: ANT 100

ANT 371 Psychological Anthropology (3,0,3) Insight is gained into nonwestern mental processes, how syncretistic religions can act as transcultural psychiatric therapy, and why western psychiatric diagnoses may not apply to people in other
cultures. The student is to develop an understanding of the historical development of a theoretical orientation. PREREQ: ANT 100.

ANT 372 Peasant Societies $(3,0.3)$ peasants in the anthropological sense are poor subsistence cultivators. They are a major component of the global population and major contributors to global economics. The student will gain some insight into non western, non-mechanized farming, and why modern industrial economics may not apply to peasant cultivators. PREREQ: ANT 100.

ANT 375 Anthropology of Aging $(3,0,3)$ This is a course in Aging. Aging begins at the moment of birth. It is addressed cross culturally and is examined theoretically, historically, ritually, and autobiographically. The student will learn the life history method first hand. PREREQ: ANT 100.

ANT 380 Origins of Civilization $(3,0,3)$ The six major early civilizations: Mesopotamia, Egypt, Indus Valley, China, Mesoamerica, and Peru; archaeological background of the development of early civilization; various theories on the development of civilization. PREREQ: ANT 100, 110 or ANT 201 or ANT 201.

ANT 385 Peoples of East and Southeast Asia (3,0,3) This course provides an anthropological overview of East and Southeast Asia from prehistory to the present; examines issues in this region including ethnicity and traditional ways of life, acculturation, conflict, impact of globalization and industrialization, and Asian Diasporas. PREREQ: 3 hours of anthropology.

ANT 391 Research Practicum I $(3,0,3)$ Placement with agency for supervised experience in developing or applying research skills. Students will also meet with other practicum students and faculty field supervisors. Same as SOC 391. PREREQ: ANT 460 or SOC 460.

ANT 392 Research: Archaeology (1-6 sem. hrs.) Student investigation of selected archaeological topics chosen in consultation with instructor. PREREQ: ANT 210 or consent of instructor.

ANT 394 Topics: Anthropology (3,0,3) A newer development in any phase of anthropology. See Schedule of Classes for current topic and prerequisites.

ANT 401 Culture Theory $(3,0,3)$ Development of the discipline; major theoretical and anthropological contributions. PREREQ: ANT 312.

ANT 410 Archaeological Theory $(3,0,3)$ Theoretical bases of archaeological research; research design, analysis, and interpretation; socio-cultural reconstruction. PREREQ: ANT 210.

ANT 460 Research Practicum Preparation $(1,0,1)$ Small-group seminar to introduce practicum skills: finding a placement assignment, writing a project proposal, making a contract, working with agency/business personnel, working in teams, scheduling projects, writing reports, and managing time. Same as SOC 460. PREREQ: SOC 322 or ANT 325.

ANT 480 Advanced Anthropological Concepts (1,0,1) Assessment testing, directed readings and individual projects in anthropology. To be taken in the anthropology major's last semester. PREREQ: consent of instructor.

ANT 491 Research Practicum II $(3,0,3)$ Continuation of ANT 391. Same as SOC 491.

ANT 499 Independent Study (1-6 sem. hrs.) Specialized aspect or topic in anthropology chosen by student and appropriate faculty member for study. PREREQ: junior or senior standing.

ANT 594 Topics: Anthropology $(3,0,3)$ A special topic in any area of anthropology. For graduate students and advanced undergraduates. Repeatable up to 12 semester hours when topics vary. PREREQ: Consent of instructor.

## Arabic

ARI
ARI 101 Elementary Arabic I $(3,1,4)$ Fundamentals; introduction to the Arabic alphabet and development of skills in grammar, pronunciation, conversation, and reading. A general education course (humanities or non-western)

ARI 102 Elementary Arabic II (3,1,4) Continuation of Arabic 101. A general education course (humanities or non-western).

ARI 201 Intermediate Arabic I $(3,0,3)$ Review and extension of basic language skills learned in ARI 101; reading and discussion of cultural, linguistic, and literary subjects. A general education course (humanities or non-western). PREREQ: ARI 102 or equivalent.

ARI 202 Intermediate Arabic II $(3,0,3)$ Continuation of grammar review and enhancement of language skills begun in ARI 201; consideration of cultural and literary subjects as well. A general education course (humanities or non-western). PREREQ: ARI 201.

ARI 350 Methods of Teaching Arabic $(3,0,3)$ Theoretical and practical considerations of teaching Arabic in American schools; required of all students seeking teaching certification in Arabic. PREREQ: ARI 202 or equivalent.

ARI 380 Topics in Advanced Arabic (3,0,3) Advanced study of Arabic language, literature and culture. May be repeated for credit when topics vary. PREREQ: ARI 202 or equivalent.

ARI 520 Readings in Arabic $(3,0,3)$ Various literary, linguistic, cultural, and pedagogical topics. May be repeated for credit when topic varies. PREREQ: ARI 380 or equivalent.

## Art <br> ART

ART 100 Art Appreciation (3,0,3) Examination of the fundamental elements of fine art to increase one's artistic awareness: emphasis placed on developing skills in viewing, interpreting and understanding the use of art in calculate, historical and contemporary contexts. For students not majoring in visual arts. A general education course (fine arts).

ART 111 Concepts in Art $(3,3,3)$ Survey of issues, concepts, and professions in art; introduction to faculty work and ideas; current thinking in the disciplines. COREQ: ART 124

ART 123 Foundations: Studio I (3,3,3) Introduction and investigation of elementary aspects of making and understanding visual art, both 2 \& 3 dimensionally. Development of personal articulation both visually and verbally through research, documentation, critical thinking, and utilization of the "Design Process." Outside research will lend context to studio activity. PREREQ: ART 210. Enrollment restricted to ART MAJORS ONLY.

ART 124 Foundations: Studio II (3,3,3) Continuation of ART 123; addressing issues of expression, interpretation; use of narrative and symbolism; investigations include experimental forms of art. PREREQ: ART 123, ARTD 210. COREQ: ART 111.

ART 221 Web Design for Non-Majors (3,0,3) Basic color theory; two-dimensional design; typography; layout; web design programs for non-majors. Basic Mac platform computer skills required. PREREQ: INF 186 or INF 286.

ART 299 Portfolio Review $(0,1,0)$ Critique forum to evaluate students' progress and skill level, to help students successfully complete the art degree program; mechanism for faculty to admit students to professional BFA programs. All students majoring in art must register for and pass Portfolio Review after 60 semester hours of university coursework or 21 semester hours in art. Can be repeated once for BFA admission only. Not required for BA students.

ART 300 Art of the Book $(3,3,3)$ Concepts, structures, and techniques necessary to create artists' books through lectures, slides, and visits to collections; binding techniques, paper, and materials; photocopying, rubber stamping, and letterpress printing. PREREQ: Foundation Core.

ART 326 Illustration $(3,3,3)$ Techniques of creative rendering. PREREQ: ARTD 210, ARTP 230, and ARTD 310.

ART 331 Digital Design $(3,0,3)$ Investigation into concepts, structures, and techniques necessary to produce sophisticated digital imagery using a variety of word and image programs.

ART 380 Study Abroad in Art (0,0,1-3) Students would participate in and complete assignments associated with traveling with a member of the Department of Art faculty and or student group. PREREQ: Consent of instructor.

ART 394 Special Topics in Art (1-3 sem. hrs.) Group or individual study/research projects with art department faculty. Topics vary and include technical, conceptual and aesthetic issues and are listed in Schedule of Classes. Repeatable to 6 semester hours toward major in art.

ART 450 Seminar: Advanced Studio (3,0,3) Criticism of work, practical gallery experience, and expansion of awareness of contemporary professional realities in the exhibition and sale of one's work.

ART 494 Special Topics in Art (1-3 sem. hrs.) Group or individual studio study/ research projects in selected media with faculty. Topics vary and include technical, conceptual, and aesthetic issues and are listed in Schedule of Classes. Repeatable up to 6 semester hours toward major in art. PREREQ: consent of instructor.

ART 496 Teaching Assistantship in Art (0,0,1-3) Student will assist a current faculty member in the teaching of a course within the Department of Art. Student responsibilities/involvement would vary based on a written agreement with instructor. PREREQ: consent of instructor.

ART 497 Senior Exhibition $(1,1,1)$ Capstone experience for all BFA students majoring in art. During the senior year of residency in the Department of Visual Art, students will learn valuable skills of exhibition design and production, culminating in an exhibition of their work critiqued by a faculty committee. All BFA students must register for and pass BFA Senior Exhibition. PREREQ: ART 299.

ART 498 Independent Study (3, 0, 3) Projects, directed by faculty members, must be selected before registration. A maximum of 6 semester hours of independent study is applicable toward the major in art.

ART 499 Gallery/Museum Internship (3-6 sem. hrs) Student works in gallery or museum gaining practical experience in methods, procedures, and programming specific to professional exhibition venues in the visual arts.

## ARTC <br> Ceramics

ARTC 240 Ceramics I $(3,3,3)$ Nature of clay and ceramic materials; traditional methods of pinch, coil, and slab formations. PREREQ: ART 123 and ARTD 210.

ARTC 340 Wheel Throwing $(3,3,3)$ Basic orientation to wheel throwing; technique, form, and function; individual problem solving; maintaining and firing kilns; stoneware and firing techniques. May be repeated for a total of 9 semester hours. PREREQ: ARTC 240.

ARTC 341 Ceramic Sculpture $(3,3,3)$ Clay as a sculptural medium; fabrication techniques, clay body formulation, and surfaces; engineering, installation, and assembly; introduction to experimental processes; individual problem solving. May be repeated for a total of 6 semester hours. PREREQ: ARTC 240.

ARTC 342 Raku and Primitive Firing (3,3,3) Advanced studio credit in Raku and primitive firing techniques. PREREQ: ARTC 240.

ARTC 440 Advanced Ceramics $(3,3,3)$ Exhibition of student initiative in developing as ceramic artist; personal development stressed. Students are expected to execute projects expressive of their cumulative knowledge and suitable for a graduating senior show; presentation includes written materials, photographs, and finished objectives. To be repeated a minimum of 6 semester hours or a maximum of 12 semester hours. PREREQ: 9 credits of 300-level ceramics.

ARTC 442 Ceramics Materials and Techniques $(3,3,3)$ Clay and glaze theory and formulation; materials handling and studio maintenance; laboratory work, lectures, and research. Required of students who concentrate in ceramics. PREREQ: ARTC 340 or ARTC 341.

ARTC 443 Kiln Construction $(3,3,3)$ Theory and practice; experimentation with methods and materials. PREREQ: ARTC 340.

## ARTD

## Drawing

ARTD 210 Drawing I $(3,3,3)$ Various media and subject matter; composition; development of ability to observe and perceive spatial relationships. COREQ: ART 123, enrollment restricted to ART MAJORS ONLY.

ARTD 310 Intermediate Drawing $(3,3,3)$ Continuation of ART 210. Human figure in development of spatial and tonal concepts; various media and color; advanced study of figure directed toward an individual medium and style. To be repeated for a total of 6 semester hours. PREREQ: Foundation Core.

ARTD 410 Advanced Drawing $(3,3,3)$ Students will work towards execution of a body of work expressive of their cumulative knowledge; life drawing encouraged; working towards a graduating senior show. To be repeated for a minimum of 9 semester hours or a maximum of 12 semester hours. PREREQ: ARTD 310 for 6 semester hours.

## ARTE

## Education

ARTE 280 Art for Elementary Education (3,3,3) Use of appropriate teaching methods, materials, techniques and vocabulary to develop meaningful art experiences in an elementary classroom. For students seeking provisional certification in Elementary Education. PREREQ: application to P-5 program.

ARTE 281 Concepts in Art Education (3,3,3) Introduction to the field of art education. Examination of current issues in teaching resources. Includes practical field experiences. PREREQ: Foundation Core.

ARTE 381 Art Education: Content I $(3,3,3)$ Teaching methods, materials and inquiry for use in elementary art classrooms. Includes practical field experiences.

ARTE 382 Art Education: Content II $(3,3,3)$ Teaching methods, materials and inquiry for use in secondary art classrooms. Focus on curriculum development, assessment and classroom management. Includes practical field experience. PREREQ: ARTE 381.

## ARTG <br> Graphic Design

ARTG 224 Introduction to Computer Graphics for Design (3,3,3) Integration of the computer as a tool in the design process to produce painted, drafted, and drawn imagery for print applications. May be substituted by CEP 300 with consent of instructor or academic adviser. PREREQ: ART 123 and ART 210; COREQ: ART 124, ART 111.

ARTG 225 Introduction to Graphic Design (3,3,3) Principles and theory of graphic design aesthetics; introduction to materials and processes. PREREQ: ART 224. COREQ: ARTG 226.

ARTG 226 Introduction to Typography (3,3,3) Principles and theory of type for communication; design aesthetics of typography. PREREQ: ARTG 224. COREQ: ARG 225

ARTG 283 Admittance Review $(0,0,0)$ Admittance review into the graphic design program. Students present their work from previous design and foundation level courses to the graphic design faculty for consideration in naming graphic design as their major. COREQ: ARTG 225, ARTG 226; PREREQ: ARTG 224.

ARTG 317 Intermediate Typography $(3,3,3)$ The practical application of typographic design and typographic systems as they relate to graphic design; aesthetics, history, form and functionality of typography. PREREQ: ARTG 224, ARTG 225, ARTG 226, ARTG 283.

ARTG 323 Intermediate Computer Graphic Design (3,3,3) Principles of information design; the computer as a tool for design of advanced print and sequential graphic materials. PREREQ: ARTG 225, ARTG 226 and ARTG 283.

ARTG 325 Production for Graphic Designers (3,3,3) Development of preparatory art for utilization of industrial printing techniques and processes; copy preparation and mechanical. May be substituted by CEP 300 with consent of instructor or academic adviser. PREREQ: ARTG 225, ARTG 226, ARTG 283 and ARTG 323.

ARTG 417 Advanced Typography (3,3,3) Design of the printed page; design considerations in varied formats; principles of information design; exploration of the grid as format for design of sequential graphics. PREREQ: ARTG 225, ARTG 226, ARTG 283, ARTH 321, ARTG 317 and ARTG 325.

ARTG 421 Special Topics in Graphic Design (3, 3, 3) Topics in graphic design. Topics listed in Schedule of Classes as topics change. Repeatable to 9 semester hours toward major in graphic design. PREREQ: ARTG 283, ARTG 325, ARTG 327.

ARTG 425 Advanced Graphic Design (3,3,3) Comprehensive graphic designing in project form; analysis and agency skills directed toward individual areas of specialization and professionalism. PREREQ: ARTG 283, ARTG 323, and ARTG 325.

ARTG 426 Advanced Graphic Design II $(3,3,3)$ Continuation of ARTG 425. PREREQ: ARTG 425.

ARTG 428 Senior Project: Graphic Design (3,0,3) Development of a single, comprehensive, student project reflecting cumulative knowledge in graphic design; furthering of organizational skills necessary to direct a design project from concept through production; development of professional practice skills, personal portfolio, and show. PREREQ: ARTG 327, ARTG 425.

ARTG 496 Graphic Design Experiential Component (3 sem. hrs.) Experiential Component for Graphic Design majors. Students arrange a graphic design internship or similar experience that acclimates them to the profession of graphic design before graduation. Students must make arrangements with instructor before beginning this course. This course is repeatable up to 6 hrs . PREREQ: ARTG 323, ARTG 325, ARTG 283.

## ARTH

History
ARTH 101 Survey of Western Art I $(3,0,3)$ Examination of significant art and architecture from prehistory through Medieval Period. A general education course (fine arts).

ARTH 102 Survey of Western Art II $(3,0,3)$ Examination of Europe's major artists and styles from Renaissance to mid-19th century. A general education course (fine arts).

ARTH 103 Survey of Western Art III $(3,0,3)$ A study of key artists and art movements in Europe and America from the late nineteenth through twentieth century. A general education course (fine arts).

ARTH 104 Survey of Asian Art $(3,0,3)$ Major styles of architecture, sculpture, print- making, painting, and ceramics of India, South Asia, China, and Japan. A general education course (fine arts or non-western perspective).

ARTH 321 History of Design $(3,0,3)$ Survey of history of design fields; influences of graphic, fashion, industrial, and interior design; implications of typography and advertising on history. PREREQ: ARTH 103, ARTG 225, and ARTG 226, and ARTG 283.

ARTH 349 Women and Art $(3,0,3)$ Significant women artists in the history of Western art from antiquity through modern times; issues and themes affecting women's participation in the visual arts.

ARTH 350 Ancient Art (3,0,3) Painting, sculpture and architecture of Egypt, Greece, and Rome. PREREQ: ARTH 101, ARTH 102 and ARTH 103.

ARTH 351 Medieval Art $(3,0,3)$ Evolution of medieval art from late antiquity to the end of Gothic period. PREREQ: ARTH 101, ARTH 102 and ARTH 103.

ARTH 352 Northern European Art/Renaissance (3,0,3) Major artists of Europe during the 15th and 16th centuries. Discussion of the relationship of the Italian Renaissance to Northern European art and of the characteristics making Northern European art distinct from Italian. PREREQ: ART 101-103.

ARTH 353 Baroque Art (3,0,3) European painting, sculpture, and architecture from 1600 to 1750. PREREQ: ART 101-103.

ARTH 354 Art of the Nineteenth Century $(3,0,3)$ Sculpture and painting of Europe from the French Revolution to the end of the 19th century. PREREQ: ART 101-103.

ARTH 355 Art of the Twentieth Century (3,0,3) Major art styles in Europe and America. PREREQ: ART 101-103.

ARTH 356 American Art $(3,0,3)$ Major development in the art of the U.S. from colonial times to the end of the 19th century. PREREQ: ART 101-103.

ARTH 357 Art of the Italian Renaissance $(3,0,3)$ Art and architecture of the Italian Renaissance during the 15th and 16th centuries. PREREQ: ART 101-103.

ARTH 358 History of Photography $(3,0,3)$ Survey of the major issues and developments in photography from 1835 to the present.

ARTH 359 Arts and Crafts of Japan $(3,0,3)$ Historical, cultural survey of Japanese arts and crafts; includes painting, printmaking, ceramics, textiles, gardening, Kabuki, and Noh drama. PREREQ: ART 104.

ARTH 360 African American Art $(3,0,3)$ This course will examine the art of African Americans within an historic, social, cultural and religious framework. Influences and connections will be sought from an examination of African traditions, rituals and design as well as contemporaneous trends in music and the performing arts.

ARTH 452 Arts of South Asia (3,0,3) Cultural and historical topics on South Asian art and artifacts; aesthetics, architecture, film, literature, painting, and sculpture. PREREQ: ART 104.

ARTH 454 Art Now $(3,0,3)$ In-depth study of contemporary art, the major movements and artists working today with an emphasis on the role of theory and criticism. PREREQ: 6 credit hours of ART Survey courses (ART 101, 102, 103, or 104).

ARTH 458 Art History: Methodology and Criticism (3,0,3) A practical guide and theoretical study of art historical and critical methods. PREREQ: ART 101, ART 102, and ART 103.

## ARTM <br> Art Media

ARTM 250 Introduction to Four Dimensional Studies in Art (3,3,3) Investigation of the fourth dimension as it relates to the process and experience of art, including the exploration of interactivity, site specificity, robotics, sound and digital video. PREREQ: ART 123 and ARTD 210.

ARTM 350 Video Installation and Sound $(3,3,3)$ This course will explore the conceptual components of video, installation and sound art while providing specific skills using non-linear editing software and creating site specific work. PREREQ: ARTM 250.

ARTM 394 Special Topics in New Media Art $(3,3,3)$ This studio course will explore emerging technological and time based artwork. Conceptual components of time, space, performance and technology will be researched and explored. May be repeated when topics vary. PREREQ: ARTM 250 or consent of instructor.

ARTM 450 Advanced Video, Installation and Sound (3,3,3) Students explore conceptual components of video art while learning advanced skills in pre through post-production. Including: film study, social theory, video art and their interrelationships. Students also learn advanced non-linear editing, sound techniques, and ways to exhibit video artwork that include installation, performance, and new genre. PREREQ: ARTM 350.

ARTM 451 Advanced New Media - Integrative Art $(3,3,3)$ Students will work with external organizations or departments at the University outside the Department of Visual Arts to create an integrated project that utilizes this knowledge base and information. PREREQ: ARTM 394 and ARTM 350.

## ARTO Photography

ARTO 210 Basic Photography $(3,3,3)$ Basic digital camera work in black and white; basic camera controls, photographic vision, photo history; contemporary trends; introduction to current software and digital printing techniques. Students are required to supply a digital SLR camera as well an external hard drive. PREREQ: ART 123, ARTD 210, ARTH 103 or consent of instructor for nonmajors.

ARTO 211 Basic Photo for Graphic Designers $(3,3,3)$ This photo class teaches graphic design students the basics of digital photography including camera controls, shooting techniques, editing and lighting. Students will also incorporate their photos into design pieces. Students are required to supply a digital SLR camera as well as an external hard drive. PREREQ: ARTG 224, 225, and ARTG 226.

ARTO 218 Study Abroad Beginning Photography (3,0,3) Beginning Photography course for students traveling abroad. Instruction in exposure, composition, and traditional photographic techniques. Students are encouraged to shoot digitally although film-based cameras acceptable. Critiques while traveling and finished project of artist book or album at completion of trip.

ARTO 310 Photography II $(3,3,3)$ Continuation of ARTO 210 with addition of color, introduction to current software for photo editing and fine printing. PREREQ: ARTO 210.

ARTO 311 Intermediate Photography (3,3,3) Advanced visual, technical, and conceptual problems initiated by students; in-depth investigations of historical and contemporary work. Can be repeated for a total of 6 semester hours. PREREQ: ARTO 310.

ARTO 313 Applied Photography: Studio and Architecture (3,3,3) Overview of commercial photography; view camera for studio illustration and architecture. Alternates with ART 395 spring semester. PREREQ: ARTO 310.

ARTO 314 Applied Photography: Studio and Location (3,3,3) Commercial photography techniques; studio portraits, environmental portraiture, fashion, industrial photography, color materials, portfolio development. taught spring semester. PREREQ: ARTO 310.

ARTO 315 Photo-documentary $(3,3,3)$ The photo-documentary as an expression of history, sociology, and the human condition. Can be repeated for a total of 6 semester hours. PREREQ: ARTO 210.

ARTO 316 Web Design for Artists $(3,3,3)$ Create web sites for artists for the purpose of research, self-expression and self-promotion using image and web programs. Students learn effective use of animation and static pages to communicate with viewer on internet. Taught in Spring semesters. PREREQ: ART foundations and beginning photography course ARTO 210, ARTO 211, ARTO 213.

ARTO 318 Study Abroad Photography II $(3,3,3)$ Intermediate photography course for students traveling abroad. Instruction in exposure, composition, and traditional photographic techniques with self-directed projects. Students are encouraged to shoot digitally although film-based cameras acceptable. Critiques while traveling and finished project of artist book or album at completion of trip. PREREQ: ARTO 210.

ARTO 320 Intermediate Digital Photography $(3,3,3)$ Continuation of technical issues from ARTO 310. Selection, masking, composite digital photographic techniques. Integration of digital technique into personal vision. Software intensive course. PREREQ: ARTO 310.

ARTO 410 Advanced Photography $(3,3,3)$ Student is expected to work towards a personal visual statement; relationship of student's work with past and contemporary photographs; final development of a body of work suitable for exhibition as a one-person show. To be repeated a minimum of 6 semester hours or a maximum of 12 semester hours. PREREQ: ARTO 311.

ARTO 411 Summer Workshop in Photography $(3,3,3)$ Intensive summer workshop in photography covering a variety of approaches and techniques. Repeatable up to 6 credit hours. PREREQ: ARTO 210.

ARTO 417 Advanced Digital Photography $(3,3,3)$ Emphasis on integration of advanced digital photographic skills into personal/professional photography. PREREQ: ARTO 320.

ARTO 418 Study Abroad Photography III $(3,3,3)$ Advanced photography course for students traveling abroad. Instruction in exposure, composition, and traditional photographic techniques with self-directed projects. Students are encouraged to shoot digitally although film-based cameras acceptable. Critiques while traveling and finished project of artist book or album at completion of trip.

## ARTP

## Painting

ARTP 130 Painting for Non-Majors $(3,3,3)$ Basic oil painting techniques to develop skills in painting; color mixing, various methods of paint application, basic drawing skills and canvas preparation, exercises in selecting subject matter and composition; use of models, still-life, and landscapes. Does not apply to major in studio art.

ARTP 230 Painting I $(3,3,3)$ Use of oil painting media; focusing on fundamental painting techniques from direct observation; criticism and contemporary concepts. PREREQ: ART 123 and ARTD 210.

ARTP 232 Painting: Watercolor $(3,3,3)$ Uses and fundamental and exploratory techniques of one of the traditional media in painting. PREREQ: ART 123 or ARTD 210.

ARTP 330 Painting II $(3,3,3)$ Fundamental issues of figurative painting; sophistication of technique; continued development of personal expression and creative invention based on observation and compositional concerns; exposure to professional standards for craft and conceptual responsibility. Repeatable up to 6 semester hours. PREREQ: ARTD 210 and ARTP 230.

ARTP 333 Materials and Techniques in Painting $(3,3,3)$ Various paint media and techniques; professional studio methods; conceptual and craft development. May be repeated when topics vary for a maximum of 6 semester hours. PREREQ: freshman core courses, and ARTP 230.

ARTP 430 Painting III $(3,3,3)$ Individual problems in painting; specialization in techniques suited to personal expression; independent painting under staff guidance; development of a consistent body of work suitable for a graduating senior show. To be repeated a minimum of 6 semester hours or a maximum of 12 semester hours. PREREQ: ARTP 330 and ARTP 333 for a total 9 semester hours.

## ARTR

## Printmaking

ARTR 272 Introduction to Printmaking (3,3,3) Basic concepts in printmaking procedures: preparation of blocks and plates, inking, registration, printing by hand and with the press; relief, monoprint, and etching techniques. PREREQ: ART 123 and ARTD 210.

ARTR 373 Intermediate Printmaking $(3,3,3)$ Continuation of introductory printmaking; further development of technique and personal imagery in various printmaking disciplines; relief, intaglio, monoprint, silkscreen, or colagraphy. Repeatable to 6 semester hours. PREREQ: ART 272.

ARTR 374 Techniques in Printmaking (3,3,3) Methods and processes in fine art printmaking in one or more of the following: relief, colagraphy; intaglio, lithography, mixed media, monotype, photo printmaking, screen printing; development of personal imagery. PREREQ: Foundations core. Repeatable to 12 semester hours.

ARTR 473 Advanced Printmaking (3,3,3) Advanced techniques in printmaking; development of personal imagery, refinement of technical skills, experimentation in mixed techniques; color printing. Repeatable for a maximum of 12 semester hours. PREREQ: ART 372, ART 373 or ART 374.

ARTR 474 Workshop in Printmaking $(3,3,3)$ Independent study in advanced printmaking. PREREQ: consent of instructor. Repeatable to 12 hours.

ARTS
Sculpture
ARTS 262 Sculpture I $(3,3,3)$ Introduction to sculpture concepts, media, and techniques. PREREQ: ART 122. PREREQ: ART 123 and ARTD 210 or consent of instructor for non-majors.

ARTS 362 Special Topics in Sculpture: Concepts and Media (3,3,3) In-depth exploration of sculptural media; conceptual development. May be repeated when topics vary for a minimum of 6 semester hours or a maximum of 9 semester hours. PREREQ: ARTS 262 or consent of instructor for non-majors.

ARTS 460 Sculpture: Advanced Study $(3,3,3)$ Visual, technical, and conceptual problems initiated by students; personal development; individual expression. Students are expected to execute a consistent body of work suitable for a senior show. May be repeated for a maximum of 12 semester hours. PREREQ: 9 credits of 300-level sculpture.

## AST

## Astronomy

AST 110 Solar Systems Astronomy with Laboratory (3,2,4) Integrated lecture and laboratory; survey of the solar system with emphasis on application of scientific method; current thought on structure, dynamics, origin, and evolution of sun and planets; laboratory activities on observational techniques and astrophysical problems. Knowledge of elementary algebra is helpful. A general education course (natural sciences).

AST 115 Stars, Galaxies, and Cosmology with Laboratory (3,2,4) Integrated lecture and laboratory; structure, dynamics, origin, and evolution of stars, galaxies, and the universe within framework of scientific methodology; laboratory activities on observational techniques and astrophysical processes. Knowledge of elementary algebra is helpful. A general education course (natural sciences).

AST 210 Backyard Astronomy $(2,2,3)$ Introduction to observational astronomy, including naked eye observing, observing with binoculars, and telescopic observing. Topics such as: amateur astronomy, star charts, coordinates; time, binoculars, telescopes, eyepieces, filters, mountings, site selection, observations of solar system objects, deep sky observations, astrophotography and imaging may also be included. PREREQ: MAT 099, AST 110 or AST 115.

AST 294 Topics: Astronomy (1-3 sem. hrs.) Special topics in astronomy. Repeatable for a maximum of 12 semester hours. PREREQ: consent of department chair.

AST 310 Astronomical Techniques $(2,2,3)$ Lecture/lab course introduces the techniques of observational astronomy. Topics may include: celestial sphere, coordinate systems, time measurements, charts, catalogs and databases, spherical trigonometry, optical telescopes, atmospheric effects, detectors and calibration, Astronomical photometry, Spectroscopy and spectrographs, and Astronomical Imaging. PREREQ: PHY 224 or PHY 213 and MAT 122 or equivalent.

AST 315 Introductory Astrophysics $(3,0,3)$ Quantitative application of physical principles to subjects of astronomical interest, such as the interaction of radiation with matter, analysis of stellar atmospheres, origin and evolution of the elements, and cosmology. Same as PHY 315. PREREQ: PHY 222 or PHY 213 and MAT 120 or MAT 122.

AST 325 Geology of the Planets $(3,0,3)$ Geological features and history of the inner planets, satellites of the gas giants, asteroids and other small solid bodies. Same as GLY 325. PREREQ: 3 hours of geology courses or AST 110.

AST 392 Directed Research: Astronomy (1-3 sem. hrs.) Supervised research in an area of astronomy currently under investigation by one or more members of the astronomy faculty. Repeatable for a maximum of 9 semester hours. PREREQ: junior standing.

AST 394 Topics: Astronomy $(3,0,3)$ Topics of current astronomical interest or significant physical and philosophical importance, e.g., cosmology, black holes, relativity, stellar evolution, the interstellar medium, observational techniques, space flight, and exobiology. PREREQ: AST 115 or consent of instructor.

AST 397 Special Projects: Astronomy (1-3 sem. hrs.) Completion of an independent project in astronomy. Repeatable for a maximum of 6 semester hours. PREREQ: junior standing.

AST 399 Independent Study: Astronomy (1-3 sem. hrs.) Directed projects for advanced students. PREREQ: AST 394.

AST 492 Directed Research: Astronomy (1-3 sem. hrs.) Supervised research in an area of astronomy currently under investigation by one or more members of the astronomy faculty. Repeatable for a maximum of 9 semester hours. PREREQ: 8 semester hours of upper division physics or astronomy courses.

## Athletic Training Program ATP

ATP 280 Pre-Athletic Training $(1,0,1)$ Knowledge, skills, and values necessary for a student entering the Athletic Training Program (ATP). The course includes 75 hours observation with athletic trainers in a variety of employment settings. Students applying to the ATP must take this course simultaneously with PHE 280. PREREQ: Pre-Athletic Training major (XATH) COREQ: PHE 280.

ATP 296 Athletic Training Clinical I $(0,2,2)$ A laboratory instruction and evaluation of NATA education competencies and clinical proficiencies associated with the topics presented in PHE 280 and other pre-professional courses. The course has an associated clinical assignment that provides a supervised practical experience in a athletic training setting. PREREQ: HEA 135, PHE 280.

ATP 300 Equipment Intensive Field Experience Program ( $0,2,1$ ) The primary focus is the application of sport related equipment and includes knowledge and skills associated with high-risk sports medical coverage. Athletic Training Students must complete a minimum of 60 clock hours.

ATP 333 Lower Extremity Evaluation (3,0,3) Knowledge, skills, and values required for an entry level certified athletic trainer to assess lower extremity injuries associated with athletes and the physically active. The course will focus on pathology, etiology, clinical skills for assessment, proper care, and referral to other health care personal when necessary. PREREQ: PHE 280, BIO 208 (208L), and BIO 209 (209L).

ATP 334 Upper Extremity Evaluation (3,0,3) Knowledge, skills, and values required for an entry level certified athletic trainer to assess upper extremity injuries associated with athletes and the physically active. The course will focus on pathology, etiology, clinical skills for assessment, proper care, and referral to other health care personal when necessary. PREREQ: ATP 333, PHE 280, BIO 208 (208L) and BIO 209 (209L).

ATP 394 Athletic Training II $(0,2,2)$ A laboratory instruction and evaluation of NATA education competencies and clinical proficiencies associated with the topics presented in ATP 333, PHE 280 and other athletic training major courses. Course has an associated clinical assignment that provides a supervised practical experience in a athletic training setting. PREREQ: Admission to the Athletic Training Program; ATP 333.

ATP 396 Athletic Training Clinical III $(0,2,2)$ A laboratory instruction and evaluation of NATA education competencies and clinical proficiencies associated with the topics presented in ATP 334, 420, and PHE 370 and other athletic training major courses. Course has an associated clinical assignment that provides a supervised practical experience in an athletic training setting. PREREQ: Admission to the Athletic Training Program; ATP 334, 420, and PHE 370.

ATP 400 General Medical Field Experience ( $0,2,1$ ) The General Medical Field Experience occurs with a family physician or physician assistant in the office environment. The athletic training student has the opportunity to observe and participate in general medical cases from the perspective of the physician. Athletic Training students must complete a minimum of 60 clock hours. PREREQ: ATP 420 and admission to the athletic training program.

ATP 420 General Medical for Athletic Training $(3,0,3)$ The principles necessary for an entry level certified athletic trainer to identify, assess, and provide appropriate care and referral of general medical (non orthopedic) conditions commonly seen by sports medicine specialists. PREREQ: PHE 280, ATP 333, BIO 208 (208L), and BIO 209 (209L).

ATP 425 Therapeutic Modalities $(3,1,4)$ Provide knowledge, skills, and values that the entry level certified athletic trainer must possess to plan, implement, document, and evaluate the efficacy of therapeutic modalities in the treatment of injuries to and illness of athletes and others involved in physical activity. The course has a 1 hour mandatory lab. PREREQ: PHE 280, BIO 208 (208L), and BIO 209 (209L).

ATP 430 Pharmacology for Athletic Training (3,0,3) Exploration of legal, physiological, and ethical parameters governing the use of pharmacological agents commonly used in the athletic training settings. PREREQ: PHE 280, ATP 333, BIO 208, 208L, and BIO 209, 209L; admission into the Athletic Training Program or permission of instructor.

ATP 435 Administration of Athletic Health Care $(3,0,3)$ Provides the athletic training student with information that will enhance his/her ability to function effectively as a professional and to enhance awareness of current administrative, professional, and legal issues pertaining to athletic training and sports medicine. PREREQ: PHE 280.

ATP 440 Rehabilitation of Athletic Injuries $(3,1,4)$ Provides the knowledge, skills, and values that entry-level certified athletic trainers must possess to plan, implement, document, and evaluate the efficacy of therapeutic exercise programs for rehabilitation and reconditioning of the injuries and illnesses of athletes and others involved in physical activity. The course has a one hour mandatory lab. PREREQ: PHE 280, 370, ATP 333, 334, BIO 208, 208L, and BIO 209, 209L.

ATP 450 Rehabilitation Field Experience $(0,2,1)$ The Rehabilitation Foeld Experience occurs with a physical therapist or athletic trainer in a sports medicine rehabilitation clinic. ATP 450 provides development of associated knowledge and skills unique to the clinic setting. Students must complete 60 clock hours. PREREQ: admission to the athletic training program and PHE 440, ATP 440.

ATP 455 Current Issues in Athletic Training (2,0,1) Provides a comprehensive review of modern athletic training issues. The course is also designed to provide the student with an introduction to research methods for health sciences/athletic training. PREREQ: PHE 360; admission to the Athletic Training Program or consent of instructor.

ATP 494 Athletic Training Clinical IV ( $0,2,2$ ) A laboratory instruction and evaluation of NATA education competencies and clinical proficiencies associated with the topics presented in ATP 430, 425, PHE 260 and 440. The course has an associated clinical assignment that provides a supervised practical experience in an athletic training setting. PREREQ: Admission to Athletic Training Program; ATP 430, 425, PHE 260, 440.

ATP 496 Athletic Training Clinical V $(0,2,2)$ A laboratory instruction and evaluation of NATA education competencies and clinical proficiencies associated with the topics presented in ATP 435, 440, PSY 405, PHE 465 and other athletic training major courses. The course has an associated clinical assignment that provides a supervised practical experience in an athletic training setting. PREREQ: Admission to Athletic Training Program; ATP 435, 440, PSY 405, PHE 465.

## Bachelor of Health Science BHS

BHS 410 Healthcare Management $(3,0,3)$ Basic applied management functions in the healthcare setting; personnel and patient scheduling; purchasing procedures; budget and quality improvement process; organization relationships and authority.

BHS 460 Advanced Patient Care $(3,0,3)$ Patient assessment; patient care relative to special needs and acute medical emergencies, interpretation of basic lab testing; EKG assessment; telemetry; and advanced cardiac life support. PREREQ: RAD 386 or RSP 386 or consent of instructor.

BHS 490 Senior Seminar (1,0,1) Discussion of current issues and problems related to health care professions. PREREQ: senior standing.

## Biological Sciences <br> BIO

BIO 120 General Biology $(3,0,4)$ Cell biology; genetics; ecology; biological evolution and diversity. Not applicable to major or minor in biological sciences. A general education course (natural sciences). PREREQ: A minimum ACT score of 18 in each division (or SAT equivalent) or completion of all pre-college curriculum courses. COREQ: BIO 120L. Fall, spring, summer.
BIO 120L General Biology Laboratory $(0,2,0)$ Lab to accompany BIO 120. Biological techniques. COREQ: BIO 120. A general education course (natural science).

BIO 121 Diseases and the Systems They Affect (3,0,3) Anatomy and physiology, including skeletal, muscular, nervous, endocrine, circulatory, respiratory, digestive, urinary and reproductive systems, and diseases that affect each. Not applicable to major or minor in biological sciences. Fall/Spring. A general education course (natural sciences). PREREQ: A minimum ACT score of 18 in each division (or SAT equivalent), or completion of all pre-college curriculum courses.

BIO 121L Disease and the Systems They Affect Laboratory (0,2,1) Laboratory to accompany BIO 121. Microscopy, anatomy, and physiology. PREREQ or COREQ: BIO 121

BIO 123 Human Ecology (3,0,3) Human influence and impact on the environment; basic ecological principles; energy sources and utilization; ethical, economic, political, and legal aspects of environmental problems and concerns. Not applicable to major or minor in biological sciences. Spring. A general education course (natural sciences). PREREQ: A minimum ACT score of 18 in each division (or SAT equivalent) or completion of all pre-college curriculum courses.

BIO 125 Biological Perspective of Wellness $(3,0,3)$ Core concepts of structure and function of human systems; contemporary holistic health attitudes and practices. Not applicable to major or minor in biological sciences. Fall, spring. $A$ general education course (natural sciences). PREREQ: A minimum ACT score of 18 in each division (or SAT equivalent), or completion of all pre-college curriculum courses.

BIO 126 Human Nutrition $(3,0,3)$ Human nutritional requirements; physiology of digestion and absorption; world food crises; food faddism and miracle diets. Not applicable to major or minor in biological sciences. Fall, spring. A general education course (natural sciences). PREREQ: A minimum ACT score of 18 in each division (or SAT equivalent), or completion of all pre-college curriculum courses.

BIO 129 Spring Flora of Kentucky (1 sem. hr.) Identification and uses of Kentucky's spring flowering plants. Two weekends (Saturday and Sunday) of field work. Spring. PREREQ: BIO 120.

BIO 131 Summer Flora of Kentucky (1 sem. hr.) Identification and uses of Kentucky's summer flowering plants. Two weekends (Saturday and Sunday) of field work. Summer, on demand. PREREQ: BIO 120.

BIO 150 Introduction to Biology I $(3,0,4)$ The chemistry of life; cell structure and function; photosynthesis and respiration; cellular reproduction and Mendelian genetics; gene regulation; population genetics, evolution and speciation. A general education course (natural sciences). Fall, spring. PREREQ A minimum ACT score of 20 in math and 18 in each remaining division (or SAT equivalent), or completion of all pre-college curriculum courses. COREQ: BIO 150L. PREREQ or COREQ: CHE 120.

BIO 150L Introduction to Biology I: Laboratory (0,3,0) Laboratory to accompany BIO 150. A general education course (natural sciences) but suggested only for students majoring or minoring in biological sciences. COREQ: BIO 150.

BIO 151 Introduction to Biology II $(3,0,4)$ Systematics and diversity of life; organismal systems anatomy and physiology; interrelationships among organisms and between organisms and their environment. A general education course (natural sciences) but suggested only for students majoring or minoring in biological sciences. Spring, summer. PREREQ: BIO 150 with a $C$ or better; COREQ: BIO 151L.

BIO 151L Introduction to Biology II: Laboratory ( $0,3,0$ ) Laboratory to accompany BIO 151. A general education course (natural sciences) but suggested only for students majoring or minoring in biological sciences. COREQ: BIO 151.

BIO 155 Orientation to Biology $(1,0,1)$ Biology issues and applications, methodology, career opportunities, and postgraduate options. Classroom discussions, faculty panels, and written essays. COREQ: BIO 151.

BIO 160 Plants and Human Cultures $(2,2,3)$ Plants and their role in human history and cultures; development of agriculture; ecological role of plants; plant products (e.g., food plants, spices, drugs, fibers, wood, rubber); horticulture; plants in religion, art, music, literature; vegetation and people. Fall. A general education course (natural sciences). PREREQ: BIO 120.

BIO 202 Microbiology for Health Professionals $(2,4,4)$ Bacteriological techniques; control, epidemiology, and pathogenicity of microorganism; pathogenhost relationships; disease states. Fall, spring, summer. PREREQ: one semester of college biology and one semester of college chemistry (CHE 115 or above). COREQ: BIO 202L.

BIO 202L Microbiology for Health Professionals: Laboratory (0,4,0) Laboratory to accompany BIO 202. Bacteriological techniques. COREQ: BIO 202.

BIO 208 Human Anatomy and Physiology I (3,0,4) Introduction to human structure and function. Not applicable to major or minor in biological sciences. A general education course (natural sciences). Fall, spring, summer. PREREQ: Composite ACT of 19 or any college biology or chemistry course with a grade of $C$ or better. COREQ: BIO 208L.

BIO 208L Human Anatomy and Physiology I: Laboratory (0,2,0) Laboratory to accompany BIO 208. Gross and microscopic morphology and application of physiological principles. A general education course (natural sciences). COREQ: BIO 208.

BIO 209 Human Anatomy and Physiology II $(3,0,4)$ Continuation of BIO 208 with emphasis on structure and function of organ systems. Students should complete both BIO 208 and 209 for an overall survey of human structure and function. Not applicable to major or minor in biological sciences. Fall, Spring, Summer. PREREQ: BIO 208. A general education course (natural sciences). COREQ: BIO 209L.

BIO 209L Human Anatomy and Physiology II: Laboratory (0,2,0) Laboratory to accompany BIO 209. Gross and microscopic morphology and application of physiological principles. A general education course (natural sciences). COREQ: BIO 209.

BIO 235 Costa Rican Natural History (2,3,3) Overview of political, ecological, developmental and cultural interactions. Pre-and-post-Colombian history. Stress on ecological problems and solutions. Required field trip (lab) over spring break. A general education course (non-western).

BIO 245 Neurobiology $(3,0,3)$ Application of principles of organismic, cell, and molecular biology to nervous system functions. Survey of current scientific literature on neuronal function and pathology. Spring PREREQ: BIO 150/151.

BIO 250 Biological Photography $(1,4,3)$ Special photographic techniques applicable in the biological sciences; micro-, macro-, close-up, telescopic, nature, and time-lapse photography; digital and film techniques; independent laboratory work. Spring, odd-numbered years. Not applicable to major or minor in the biological sciences. PREREQ: BIO 150-151.

BIO 255 Biological Literature and Research (3,0,3) Information retrieval and presentation, introduction to biological literature. Scientific methodology including research problem selection, experimental design, literature survey, and proposal development. A course for the sophomore year. PREREQ: BIO 150-151.

BIO 272 Medical and Biological Terminology (3,0,3) Derivatives, prefixes, roots, and suffixes. Fall. PREREQ: BIO 150 or BIO 208.

BIO 291W Advanced Writing in Biology $(3,0,3)$ Introduction to scientific literature, experimental design, research, and proposal development. Advanced tech-
niques in information search and retrieval, scientific writing, and effective presentation., A general education course (Written Communications). PREREQ: ENG 101, BIO 151.

BIO 294 Topics: Biological Sciences (1-3 sem. hrs.) Intensive study of specialized subject matter in biological sciences. May be repeated for credit when topic varies. Offered on demand. PREREQ: consent of instructor.

BIO 300 Comparative Vertebrate Anatomy $(3,0,4)$ Organs and organ systems of representative vertebrates; phylogentic relationships among vertebrate classes. Fall. PREREQ: BIO 150-151. COREQ: BIO 300L.

BIO 300L Comparative Vertebrate Anatomy: Laboratory (0,3,0) Laboratory to accompany BIO 300. COREQ: BIO 300.

BIO 301 Invertebrate Zoology $(2,0,4)$ Classification, anatomy, physiology, ecology, and preservation of invertebrate animals. Fall, odd-numbered years. PREREQ: BIO 150-151. COREQ: BIO 301L.

BIO 301L Invertebrate Zoology: Laboratory ( $0,4,0$ ) Laboratory to accompany BIO 301. Field trips. COREQ: BIO 301.

BIO 302 General Microbiology (2,0,4) Microbiological techniques; classification and morphology of microorganisms; biochemistry and control of growth; pathogenic microorganisms. Fall, spring. PREREQ: one semester of college chemistry and BIO 151. COREQ: BIO 302L.

BIO 302L General Microbiology: Laboratory ( $0,4,0$ ) Laboratory to accompany BIO 302. Microbiological techniques. COREQ: BIO 302.

BIO 303 Vertebrate Zoology $(2,0,4)$ Classification, evolution, life histories, ecology, and distribution of vertebrates. Fall, even-numbered years. PREREQ: BIO 150-151. COREQ: BIO 303L.

BIO 303L Vertebrate Zoology: Laboratory $(0,4,0)$ Laboratory to accompany BIO 303. Field trips. COREQ: BIO 303.

BIO 304 General Ecology (3,0,3) Interrelationships between organisms and their environment. Fall. PREREQ: BIO 150-151.

BIO 304L Ecology Laboratory ( $0,3,1$ ) Sampling techniques, experimental design, and data analyses in ecological research. Field trips. Fall. COREQ or PREREQ: BIO 304.

BIO 305 Vertebrate Embryology (3,0,4) Principles and mechanisms of embryonic development. Fall, even-numbered years. PREREQ: BIO 150-151. COREQ: BIO 305L.

BIO 305L Vertebrate Embryology: Laboratory (0,2,0) Laboratory to accompany BIO 305. COREQ: BIO 305.

BIO 308 Plant Systematics $(2,0,4)$ Principles and practices; identification, classification, nomenclature, and evolution of vascular plants; major plant families of local flora. Fall, odd-numbered years. PREREQ: BIO 150-150L. COREQ: BIO 308L.

BIO 308L Plant Systematics: Laboratory $(0,4,0)$ Laboratory to accompany BIO 308. COREQ: BIO 308.

BIO 309 Plant Ecology (3,0,4) Interrelationship of plants and their environment; classification, distribution, structure, and analysis of vegetation; plant succession; ecological methods. Field trips. On demand. PREREQ: BIO 150-151 or consent of instructor. COREQ: BIO 309L.

BIO 309L Plant Ecology: Laboratory (0,3,0) Laboratory to accompany BIO 309. Field trips. COREQ: BIO 309.

BIO 310 Plant Morphology $(2,0,4)$ Structure, life history, and relationships of representative plants. Spring, even numbered years. PREREQ: BIO 150-151. COREQ: BIO310L.

BIO 310L Plant Morphology: Laboratory ( $0,4,0$ ) Laboratory to accompany BIO 310. COREQ: BIO 310.

BIO 311 Mycology (2,0,3) Morphology, identification, evolution, ecology, and culturing techniques of fungi. Fall, even-numbered years. PREREQ: BIO 150. COREQ: BIO 311L.

BIO 311L Mycology: Laboratory (0,2,0) Laboratory to accompany BIO 311. COREQ: BIO 311.

BIO 312 Dendrology $(1,0,3)$ Identification and vegetational aspects of woody plants, especially those of eastern U.S. Fall, even-numbered years. PREREQ: BIO 150-151 or BIO 211. COREQ: BIO 312L.

BIO 312L Dendrology: Laboratory (0,6,0) Laboratory to accompany BIO 312. Field trips. COREQ: BIO 312.

BIO 313 General Botany ( $2,0,4$ ) Morphology; taxonomy; physiology; genetics; ecology; evolution. Spring. PREREQ: BIO 150. COREQ: BIO 313L.

BIO 313L General Botany: Laboratory $(0,4,0)$ Laboratory to accompany BIO 313. Field trips. COREQ: BIO 313.

BIO 320 Entomology (2,0,4) Anatomy, physiology, ecology, behavior, life cycles, classification, and economic effects of insects. Fall, even-numbered years. PREREQ: BIO 150-151. COREQ: BIO 320L.

BIO 320L Entomology: Laboratory ( $0,4,0$ ) Laboratory to accompany BIO 320. COREQ: BIO 320.

BIO 342 Biometry $(3,0,3)$ Statistical techniques for biological sciences. Fundamental experimental design, exploratory data analysis, parametric and non-parametric tests, and selected multivariate procedures as applied to biological data. Use of statistical software. PREREQ: BIO 151-151L and STA 205.

BIO 348 Genetics, Molecular and Cell I $(3,0,3)$ Essential concepts in genetics, molecular and cell biology: macromolecules, DNA and chromosomes, DNA replication, recombination and repair, mitosis and meiosis, Mendelian genetics, gene expression, structure and function of cellular organelles. Fall. PREREQ: BIO 150-151 and CHE 120-121.

BIO 349 Genetics, Molecular and Cell II $(3,0,4)$ Applications of knowledge gained in BIO 348. Human gene therapy, genetically modified organisms, the biology and genetics of cystic fibrosis, molecular phylogenetics, bioremediation, fermentation processes, conservation genetics, and cancer. Spring. PREREQ: BIO 348. COREQ: BIO 349L.

BIO 349L Genetics, Molecular and Cell Lab ( $0,3,0$ ) Laboratory to accompany BIO 349. Hands-on experience with basic genetics, molecular, and cell biology techniques. Spring. COREQ: BIO 349.

BIO 358 Evolution of Organisms $(3,0,3)$ Mechanisms; historical and philosophical perspectives; empirical evidence; contemporary application. Spring. PREREQ: BIO 150-151 and BIO 348.

BIO 360 Advanced Biology of the Cell $(3,0,3)$ Structure and function of cellular organelles; role of energy, membranes, nucleic acids, and proteins in cellular regulation; nature of nerve impulse. Spring. PREREQ: BIO 150-151 and one year of college chemistry (with laboratory).

BIO 381 Human Nutrition and Metabolism (3,0,3) Biochemistry and physiology of human nutritional requirements and deficiencies; current topics in nutrition, including food faddism, medical nutrition, and the world food crisis. Spring, even-numbered years. PREREQ: BIO 150-151 and CHE 310.

BIO 396 Externship: Biological Sciences (1-2 sem. hrs.) Experiential learning at institutions, universities, or businesses specializing in a biological field. Course may be repeated for new externship project; up to 4 semester hours may be earned in this course. For students majoring or minoring in biological or environmental sciences. Fall, spring, summer. PREREQ: BIO 150-151 and consent of instructor before registration.

BIO 396 Practicum: Veterinary Medicine $(0,4,2)$ Work with a veterinarian specializing in large/small animals to learn skills and acquire practical information. For pre-veterinary students. Fall, spring. PREREQ: consent of instructor and a local veterinarian.

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BIO 399 Techniques: Biological Sciences (1-2 sem. hrs. each) Experience in media preparation; in herbarium, museum, and field techniques; in use of laboratory equipment; or in other practical facets of biology. Topics decided upon in consultation between student and instructor. Up to 4 semester hours may be earned in this course. Fall, spring, summer. PREREQ: BIO150-151, consent of instructor prior to registration.

BIO 400 Advanced Molecular Biology (2,0,4) Introduction to principles of modern molecular biology; DNA and RNA structure and synthesis; protein synthesis; gene structure, expression, and regulation; recombinant DNA techniques; plant and animal models; transgenics; contemporary bioethics issues. Fall. PREREQ: BIO 348, 349, 349L, CHE 310-311; BIO 482 or CHE 482 recommended. COREQ: BIO 400L.

BIO 400L Advanced Molecular Biology: Laboratory (0,4,0) Laboratory to accompany BIO 400. DNA and RNA purification; DNA cloning and restriction enzyme analysis; plasmid vector screening and purification; Southern blotting; hybridization; Polymerase Chain Reaction (PCR); bacterial cell transformation; fusion proteins. COREQ: BIO 400.

BIO 402 Advanced Neurobiology $(3,0,4)$ Explore the higher functions of the nervous system in terms of the molecular and cellular biology. Spring, even numbered years. PREREQ: BIO 245, BIO 255. COREQ: BIO 402L.

BIO 402L Advanced Neurobiology (0,3,0) Laboratory to accompany BIO 402. COREQ: BIO 402.

BIO 404 Herpetology (3,0,4) Evolution, classification, anatomy, physiology, behavior, and ecology of reptiles and amphibians; identification of local species. Spring, odd-numbered years. PREREQ: BIO 150-151; BIO 300 or BIO 303 recommended. COREQ: BIO 404L.

BIO 404L Herpetology: Laboratory (0,3,0) Laboratory to accompany BIO 404. Field trips. COREQ: BIO 404.

BIO 405 Invertebrate Paleontology (3,0,4) Major phyla in the fossil record; paleobiological, systematic, and evolutionary aspects; collection and identification of local fossils. Fall, odd- numbered years. Same as GLY 402. PREREQ: BIO 301 or GLY 302. COREQ: BIO 405L.

BIO 405L Invertebrate Paleontology: Laboratory ( $0,2,0$ ) Laboratory to accompany BIO 405. COREQ: BIO 405.

BIO 407 Ornithology $(2,0,4)$ Classification, anatomy, physiology, behavior, ecology, and field identification of birds. Field trips. Spring, even-numbered years. PREREQ: one year of college biology and consent of instructor prior to registration. COREQ: BIO 407L.

BIO 407L Ornithology: Laboratory $(0,4,0)$ Laboratory to accompany BIO 407. Field trips. COREQ: BIO 407.

BIO 409 Biogeography $(3,0,3)$ Present and past geographical distribution of organisms. Spring, odd-numbered years. PREREQ: BIO 150-151.

BIO 410 Conservation Biology $(3,0,3)$ Review of issues affecting modern conservation efforts: history, genetics, demography, biodiversity patterns, community change, global change, and environmental management. Spring, even-numbered years. PREREQ: BIO 150-151; BIO 304 and BIO 352 highly recommended.

BIO 416 Field Botany (3-4 sem. hrs.) Observation, identification, and distribution of flora. Summer, offered on demand. PREREQ: one year of college biology.

BIO 421 Mammalogy (3,0,4) Evolution, systematics, zoogeography, and natural history of mammals. Required field trips. PREREQ: BIO 150-151. COREQ: BIO 421L.

BIO 421L Mammalogy: Laboratory ( $0,3,0$ ) Laboratory to accompany BIO 421. COREQ: BIO 421.

BIO 422 Limnology (2,0,4) Physical, chemical, and biological properties of inland waters; organization of aquatic communities, phytoplankton, zooplankton, and benthos, trophic dynamics and eutrophication; limnological methods and techniques. Fall, odd-numbered years. PREREQ: one year of college biology and
one year of college chemistry BIO 304 and BIO 255 recommended. COREQ: BIO 422L.

BIO 422L Limnology: Laboratory (0,4,0) Laboratory to accompany BIO 422. Field trips. COREQ: BIO 422.

BIO 425 Mammalian Anatomy and Physiology I $(3,0,4)$ Anatomical, histological, and physiological mechanisms of skeletal, muscular, and nervous systems. First semester of a one-year course; students should follow this course with BIO 426. Fall. PREREQ: BIO 150-151; CHE 310. COREQ: BIO 425L.

BIO 425L Mammalian Anatomy and Physiology I Laboratory (0,3,0) Laboratory to accompany BIO 425. Fall. COREQ: BIO 425.

BIO 426 Mammalian Anatomy and Physiology II $(3,0,4)$ Regulation of physiological processes. Continuation of BIO 425. Spring. PREREQ: BIO 255 or BIO 340 and BIO 425 or consent of instructor. COREQ: BIO 426L.

BIO 426L Mammalian Anatomy and Physiology II: Laboratory (0,3,0) Laboratory to accompany BIO 426. Spring. COREQ: BIO 426.

BIO 430 Immunology $(3,0,4)$ Biology of the immune response. Spring, odd-numbered years. PREREQ: one semester of microbiology. COREQ: BIO 430L.

BIO 430L Immunology: Laboratory ( $0,2,0$ ) Laboratory to accompany BIO 430. COREQ: BIO 430.

BIO 440 Animal Behavior $(3,0,4)$ Nervous systems and neurophysiology; classification, genetics, evolution, and ecology of behavior; developmental and social behavior. Spring, odd-numbered years. PREREQ or COREQ: BIO 255 or BIO 340; COREQ: BIO 440L.

BIO 440L Animal Behavior: Laboratory (0,3,0) Laboratory to accompany BIO 440. COREQ: BIO 440.

BIO 441 Animal Physiological Ecology (3,0,4) Internal adjustments by animals to physical changes at the organism-environment interface. Influence of the physical and biological characteristics of the external milieu on geographic, evolutionary, and temporal distribution of animals. Energetics, homeostasis, and adaptation, including role of behavior. PREREQ: BIO 304. COREQ: BIO 441L.

BIO 441L Animal Physiological Ecology Lab (0,3,0) Laboratory to accompany BIO 441. COREQ: BIO 441.

BIO 445 Anatomy of Vascular Plants $(2,0,4)$ Structure and differentiation of cells, tissues, and organs. Offered on demand. PREREQ: BIO 150-151, BIO 211. COREQ: BIO 445L.

BIO 445L Anatomy of Vascular Plants $((0,4,0)$ Laboratory to accompany BIO 445. COREQ: BIO 445.

BIO 446 Plant Physiology $(3,0,4)$ Photosynthesis, cellular respiration, carbohydrate and protein metabolism, mineral nutrition, hormonal controls, and related topics in physiology of green plants. Spring, odd-numbered years. PREREQ: BIO 150-151 and CHE 311 (with laboratory). COREQ: BIO 446L.

BIO 446L Plant Physiology Laboratory ( $0,3,0$ ) Laboratory to accompany BIO 446. COREQ: BIO 446.

BIO 455 Scanning Electron Microscopy $(0,6,3)$ Lecture-laboratory; theory and applications; phase contrast, polarizing, and transmission microscopes discussed for comparative purposes. Spring. PREREQ: one year of college biology and consent of instructor.

BIO 460 Introduction to Marine Science $(3,3,4)$ Survey of physical, chemical, and biological oceanography; marine ecology, primary productivity, and biodiveristy. Required field trip to marine research laboratory. Summer, even numbered years. PREREQ: BIO 151 and BIO 255.

BIO 461 Ecology and Geology of Coral Reefs $(3,3,4)$ Ecological and geological processes in reef ecosystems. Benthic and pelagic biotic communities, reef development and erosion, sedimentation, ancient and modern reefs, responses to environmental change. Required field trip to marine research laboratory. PRE-

REQ: Declared major at or above the sophomore level in a natural science and consent of instructor.

BIO 462 Tropical Ecology $(3,0,3)$ Unique features of tropical ecosystems, abiotic characteristics, gap dynamics biodiversity, plant-animal interactions, economic importance of tropical forests, causes and consequences of tropical deforestation. Spring, even-numbered years. PREREQ: BIO 151. BIO 303 and 304 recommended.

BIO 463 Tropical Ecology Laboratory $(0,10,1)$ Practical experience in studying tropical biota. Taught during spring break at location in tropics every other year. PREREQ: BIO 151. BIO 462 recommended.

BIO 465 Regional Biology (3-5 sem. hrs.) Intensive study of flora and/or fauna of a particular region. May be repeated once for a different region. Offered on demand. PREREQ: one year of college biology and consent of instructor.

BIO 467 Endocrinology $(3,0,3)$ Human endocrine system, hormonal control of body processes, and hormonal disorders. Fall, odd-numbered years. PREREQ: BIO 150-151 and CHE 310.

BIO 470 Medical Microbiology $(3,0,4)$ Pathogenic bacteria and viruses; techniques for isolation, identification, and control of specific disease agents; functions of the immune response in preventing and promoting disease. Fall, evennumbered years. PREREQ: BIO 302. COREQ: BIO 470L.

BIO 470L Medical Microbiology Laboratory (0,2,0) Laboratory to accompany BIO 470. COREQ: BIO 470.

BIO 474 Microbial Ecology $(3,0,3)$ Interrelationships of prokaryotic and eucaryotic microorganisms in aquatic and terrestrial environments; microbial sampling and analysis methods. Fall, odd-numbered years. PREREQ: BIO 302. COREQ: BIO 474L.

BIO 474L Microbial Ecology: Laboratory $(0,2,0)$ Laboratory to accompany BIO 474. COREQ: BIO 474.

BIO 475 Virology $(3,0,3)$ Classification, chemical composition, morphology, genetics, and replication of viruses, action of physical and chemical agents on viruses; host response to viral infection. Fall, odd-numbered years. PREREQ: BIO 302.

BIO 482 Biochemistry I $(3,0,3)$ Introduction to the chemistry of the molecules of life; carbohydrates, proteins, lipids; protein structure and function; enzyme mechanism; membrane structure and function; introduction to metabolism. Fall. Same as CHE 482. PREREQ: C or better in CHE 311.

BIO 482L Biochemistry I Laboratory $(0,6,2)$ Advanced laboratory techniques used in isolation, purification, and characterization of amino acids, peptides, and proteins; training in use of modern equipment for experimentation and of computers for data analysis. Same as CHE 482L. COREQ: BIO 482 or CHE 482, or PREREQ: grade of C or better in BIO 482 or CHE 482.

BIO 483 Biochemistry II $(3,0,3)$ Metabolism, biosynthesis of cell components, nucleic acid replication, protein synthesis, DNA recombination, hormone action. Spring. Same as CHE 483. PREREQ: C or better in BIO 482 or CHE 482.

BIO 491 Comprehensive Examination $(1,0,0)$ Examination covering entire area of biological sciences. (Pass/Fail) PREREQ: 20 hours upper-division courses in Biological Sciences. Fall and Spring.

BIO 492 Directed Research (1-3 semester hrs. each) Development and completion of a scientific research project chosen in consultation with instructor. Final project report is required. Up to 6 semester hours may be earned in this course. For students majoring or minoring in biological sciences and especially for those planning further study in graduate school. Fall, spring, summer. PREREQ: BIO 255 and consent of instructor.

BIO 494 Topics: Biological Sciences (1-3 sem. hrs. each) In depth study of specialized subject matter. May be repeated for credit once when topic varies. Offered on demand. PREREQ: junior or senior standing in biological sciences.

BIO 496 Assistant: Undergraduate Laboratory (1-2 sem. hrs.) Participation in planning, setting-up, teaching, conducting reviews, and testing in an undergraduate laboratory course. For students majoring or minoring in biological sciences. Up to 4 semester hours may be earned in this course. Fall, spring, summer. PREREQ: BIO150-151, biology GPA of at least 3.00, and permission of instructor prior to registration.

BIO 521 Mammalogy for Teachers $(3,0,3)$ A content course. Evolution, anatomy, adaptations, ecology and diversity of world mammals. Applicable for middle and high school. Not open to students who have taken BIO 421. PREREQ: Certification to teach middle or high school science or permission of instructor.

## Business <br> BUS

BUS 101 Introduction to Business $(3,0,3)$ Basic knowledge of organizational structures, business functions, and types of business enterprises; assistance in decisions about majors and careers; socialization to expectations and behaviors associated with careers in business. Open only to students with fewer than 45 earned hours, or by consent of instructor.

BUS 230 Legal Environment $(3,0,3)$ Concepts in legal environment; ethical considerations in business decisions; broad overview of judicial process, legal systems, contracts, torts, environmental and international issues, employment law, and consumer protection. PREREQ: sophomore standing.

BUS 260 Selected Business Topics in International Settings (1-3,o,1-3) Learning experiences outside the United states sponsored by Cooperative Center for Study Abroad, the COB's International Business Center or the Office of International programs. Includes preparatory assignments, international travel and, if applicable, follow-up meetings or assessment activities. PREREQ: Sophomore standing and others as determined by instructor.

BUS 294 Topics: International Business $(3,0,3)$ Specialized topics of faculty and student interest. Topics vary and may be used for CCSA courses. May be taken three times if topics vary. PREREQ: sophomore standing.

BUS 300 Career Enhancement (1,0,1) Designed to assist students planning careers in business with the transition from college to the workforce. PREREQ: junior standing. Graded pass/fail.

BUS 330 Ethics in Managerial Decision-Making (3,0,3) Application of ethics to decision-making in business; case method, discussion and presentations. BUS 230 and junior standing. PREREQ: BUS 230 and junior standing.

BUS 334 Business Entities and Commercial Paper (3,0,3) Forms of business organizations including partnerships and corporations: nature and formation, benefits, financing and securities regulation, rights and responsibilities; commercial paper: basic concepts, negotiability, holders in due course, liability, defenses, discharge, checks and the banking system. PREREQ: BUS 230; junior standing; declared major in any bachelor's program.

BUS 360 Selected Business Topics in International Settings (1-3,0,1-3) Learning experience outside the United States sponsored by the Cooperative Center for Study Abroad, the COB's International Business Center or the Office of International Programs. Includes preparatory assignments, international travel and, if applicable, follow-up meetings or assessment activities. PREREQ: junior standing and other as determined by topic and instructor.

BUS 394 Topics: Legal Environment $(3,0,3)$ Topics vary and will be listed in the Schedule of Classes. Repeatable to 6 semester hours. PREREQ: junior standing.

BUS 396 Internship: Business ( 0,10 or 15,2 or 3 ) Supervised non-paid work experience at corporations in Greater Cincinnati related to student major or minor, and coordinated by a member of the participating organization and a member of the department faculty. Interested students must submit applications to the department chair. PREREQ: junior or senior standing and consent of instructor; declared major in any bachelor's program.

BUS 532 CPA Law (3,0,3) Legal topics relevant to professional accounting: contracts, agency, business entities, Uniform Commercial Code, and Securities law. PREREQ: BUS 230; junior standing; declared major in any bachelor's program or consent of Chair of Accountancy.

## Business Informatics BIS

BIS 300 Management Information Systems $(3,0,3)$ Principles of MIS designed to introduce students to the fundamentals of Management Information Systems and to apply problem-solving skills in Excel, Access, and Web development. PREREQ: Junior standing, STA 212 Statistics I and demonstrated competency in Word, Excel and PowerPoint e.g., completion of INF 101 or equivalent transfer work or placement.

BIS 305 Advanced Business Programming ( $3,0,3$ ) Computer software design and programming in an applications development environment; systems design, programming techniques, and language syntax for developing computer based business systems; programming system methodologies. PREREQ: BIS 110.

BIS 310 Structured Analysis \& Design (3,0,3) The systems development life cycle; systems analysis and general design; analysis strategies, tools, and techniques for documenting current systems and developing proposed systems; systems modeling, data modeling, design criteria, cost/benefit trade-offs, and project management; development of a comprehensive systems analysis project. PREREQ: BIS 110 and junior standing.

BIS 330 IT Project Management $(3,0,3)$ This course provides students knowledge and skills pertaining to IT Project Management. It exposes students to the knowledge requirements for managing information technology projects and fosters development of skills pertaining to the use of computer software for project management. PREREQ: Junior standing or consent of chair.

BIS 380 Quantitative Analysis with Excel $(3,0,3)$ Business decisions require the basic skills of analyzing data to understand the problem more completely and to produce better answers. The business environment uses tools and techniques to accomplish this analysis. This course is designed to introduce students to those tools and techniques and how they can be automated. PREREQ: INF 105 (or equivalent) ACC 200, STA 212, or permission of instructor.

BIS 382 Principles of Information Security $(3,0,3)$ An introduction to the various technical and administrative aspects of Information Security and Assurance. This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system, with appropriate intrusion detection and reporting features. PREREQ: BIS 300 or equivalent.

BIS 402 Programming for E-Commerce (3,0,3) Employ technologies, tools, and practices for development of corporate Intranets and the Internet for information management and electronic commerce; coverage of internet working technologies, site design, content development languages and components, and data management techniques; development of web-based sites for business and commercial operations. PREREQ: BIS 305 or equivalent; junior standing.

BIS 410 Advanced Analysis and Design $(3,0,3)$ Systems design and implementation; design strategies, tools, and techniques for developing computer based systems; application of systems analysis, systems design, and systems development software to a systems development project. Open only to students certified as majoring in business or with consent of instructor. PREREQ: INF 260, BIS 310; junior standing.

BIS 420 Knowledge Management and Enterprise Applications (3,0,3) This course explores strategic knowledge management and its applications in business organizations. It also focuses on enterprise systems that facilitate the planning and use of organizational databases to implement decision support systems, data warehousing and data mining systems and executive support systems to improve organizational performance. PREREQ: Junior Standing; certified major in business informatics or consent of chair.

BIS 430 Workflow Design and Management $(3,0,3)$ This course provides learners a managerial introduction to ideas pertaining to the analysis, design and management of both organizational and inter-organizational business processes. It focuses on workflow management issues at the individual, group and organizational levels. Business methodologies and practices from industry such as business process reengineering, customer relationship management, and supplier chain management are used to contextualize theoretical ideas pertaining to process analysis and workflow management. The relationship between process
innovation methods and strategic business models is also explored and learners are exposed to software and optimization tools pertaining to process modeling and workflow simulation. PREREQ: Junior Standing; certified major in business informatics or consent of chair.

BIS 435 Database Management Systems (3,0,3) Concepts and techniques of data organization and access; basic data structures, file organization and processing, database modeling and processing, database management systems, database analysis and design, data administration, and implementing databases in a client/ server architecture. PREREQ: INF 282 and certified major in business informatics or consent of chair.

BIS 440 Global Information Technology Management (3,0,3) This course provides insight into issues relating to international information systems that serve global markets and facilitate expansion and entry of businesses into global information systems and the management of international outsourcing projects are also emphasized. Cross-cultural and ethical issues pertaining to international information systems are emphasized. PREREQ: Junior standing; certified major in business informatics or consent of chair.

BIS 485 Strategic Information Systems Management (3,0,3) This course enables future managers of MIS to better utilize information technologies for competitive advantage. It also focuses on managerial techniques for setting the direction for organizational IT resource planning and the development of IT policies and strategies for complex business environments. By integrating pertinent theories and business cases the following topics will be explored: effects of IT on competition; inter-organizational systems; electronic supply chain management; customer relationship management; strategic business reengineering; enterprise resource planning (ERP); outsourcing; IS planning methods; and methods for the control of organizational IT resources. This course serves as the capstone course for the Information Systems major in Business Administration. PREREQ; Senior standing; certified major in business informatics or consent of chair. Should be taken within the last 15 hours of program.

BIS 499 Independent Study: Information Systems (3,0,3) Student investigation of a topic or completion of a project. Meeting times arranged with instructor. Open only to students certified as majoring in information systems. PREREQ: BIS 305; senior standing; certified major in business informatics; consent of instructor.

BIS 494 Topics: Information Systems $(3,0,3)$ Selected topics in computer based information systems. Offered periodically with topics announced in advance. Open only to students certified as majoring in information systems. May be repeated to a maximum of 6 semester hours. PREREQ: Senior standing; certified major in business informatics.

## Career and Technical Education <br> CTE

CTE 180 Foundations in Career and Technical Education (3,0,3) Principles, objectives, historical perspective, purposes, and roles of career and technical education as related to technological, societal, and educational influences.

CTE 181 Instructional Systems Development $(3,0,3)$ Design and development of instructional systems; performance objectives, appropriate content, instructional media, teaching learning strategies, and curricula analysis in specialized industrial education programs at all educational levels.

CTE 280 Instructional Methods of Career and Technical Education (3,0,3) Methods and strategies for the implementation or presentation of instructional systems in specialized career and technical education programs at all educational levels. PREREQ: CTE 181.

CTE 281 Evaluation in Career and Technical Education (3,0,3) Principles and procedures in evaluating student and teacher behavior including preparation of measuring devices, methods of assessing technical competency, interpretation of standardized tests and introduction to statistical analysis of test data. PREREQ: CTE 181.

CTE 285 NOCTI Competency Test (3-6 sem. hrs.) National Occupational competency Testing Institute Examination in a specific career/technical area. Students must register for examination with an approved NOCTI Testing Center.

CTE 286 NOCTI Competency Test (3-6 sem. hrs.) National Occupational Competency Testing Institute Examination in a specific career/technical area. Students must register for examination with an approved NOCTI Testing Center.

CTE 316 Intercultural Business Communication $(3,0,3)$ Written, oral, and nonverbal communication techniques in diverse domestic and multinational hightech work environments for effective communication among employees and with customers and clients. PREREQ: Junior classification or consent of instructor.

## CTE 380 Organization and Management of Career \& Technical Education

 $(3,0,3)$ Laboratory and equipment planning and maintenance programs, classroom and laboratory management systems; purchasing, storage, dispensing, and inventory control procedures; public relations and COREQ: curricular responsibilities as applied to career and technical education programs at all educational levels. PREREQ: CTE 181 or consent of instructor.CTE 382 Exceptional Students in Career and Technical Programs (3,0,3) Adapting career and technical school programs to accommodate integration of exceptional students in vocational laboratories; identification of characteristics, curricula, and methodological modifications and supportive services and personnel.

CTE 385 NOCTI Competency Test (3-6 sem. hrs.) National Occupational competency Testing Institute Examination in a specific career/technical area. Students must register for examination with an approved NOCTI Testing Center.

CTE 487 Teaching Career and Technical Education Capstone (4,0,4) Practicum approach for improvement of teaching: problems and techniques of planning and implementing instructional systems and teaching strategies. Satisfies instructional internship requirement for teachers who have completed four years of experience.

CTE 488 Problems in Career and Technical Education (3,0,3) Problems, issues, and trends. Students will complete a paper and present findings in a seminar. PREREQ: CTE 280.

CTE 496 Instructional Internship (8 sem. hrs.) Orientation/exploration or preparation level classroom experiences through observing, planning, and teaching under supervision of an experienced teacher; conferences and seminars.

## Cooperative Education <br> CEP

CEP 101 Career Development $(2,0,2)$ Comprehensive overview of the career planning process; techniques of self assessment and career exploration; skills of decision making and job search. See Schedule of Classes for information on special sections for undeclared students, students interested in co-op, and students approaching graduation. PREREQ: completion of one semester of college coursework.

CEP 300 Cooperative Education Experience I (1-3 sem. hrs.) Supervised work experience relating to a student's academic major; employment learning experience planned, supervised, and coordinated by employer, faculty coordinator, and a member of the Career Development staff. Cooperative Education is open to most majors on campus. Students must complete an informational session in the Career Development Center prior to enrollment. Academic credits are awarded for the cooperative work experience on a variable scale. Students may choose to earn between 1 and 3 credits a semester for a maximum of 12 total CEP 300 credits. Once placed in a position by the Co-op Office, the student is required to register for Cooperative Education course credit each semester worked. Since co-op courses will be add-on credit, a student may earn credits as long as she/he is eligible to remain in the co-op program.

## Chemistry <br> CHE

CHE 102 Introduction to Chemistry ( $3,0,3$ ) Selected essential topics in chemistry, including solutions, reactions, stoichiometry, and properties of gases, liquids, and solids. Prerequisite for CHE 115 and CHE 120 for those who did not study chemistry in high school or are not prepared for CHE 115 or CHE 120. NOT a general education course. (Formerly CHE 110) PREREQ: A minimum score of 18 on the ACT math section or equivalent.

CHE 105 Discovering Chemistry with Laboratory $(3,2,4)$ Integrated lecture and laboratory; basic principles of chemistry and their applications in daily life; promotion of reasoning and problem solving skills by utilizing computer based technologies and hands on, discovery/inquiry, and cooperative learning approaches. For all non-science students and students majoring in education. Cannot be taken for credit by students who have passed CHE 112. A general education course (natural sciences).

CHE 112 Chemistry and Society $(3,0,3)$ Basic principles of chemistry and their applications in society. For students not majoring in science. Enrollment in CHE 112 L is recommended but not required. Cannot be taken for credit by students who have passed CHE 105. (Formerly CHE 100) A general education course (natural sciences).

CHE 112L Chemistry and Society Laboratory ( $0,2,1$ ) Simple laboratory techniques in experiments designed to study the properties of model compounds and consumer products; synthesis and analysis of common materials. (Formerly CHE 100L) A general education course (natural sciences). PREREQ or COREQ: CHE 112.

CHE 115 Physiological Chemistry ( $3,0,3$ ) General, organic, and biological chemistry of the body; metabolism, pharmacology, toxicology, and nutrition. Not applicable toward a major or minor in the natural sciences. A general education course (natural sciences). PREREQ: high school chemistry and a minimum score of 18 on ACT math section or equivalent; or a C or better in CHE 102. COREQ: CHE 115L.

CHE 115L Physiological Chemistry Laboratory (0,2,1) Laboratory elucidation of chemical and biochemical principles. A general education course (natural sciences). COREQ: CHE 115.

CHE 120 General Chemistry I $(3,0,3)$ Principles of chemistry; physical and chemical properties of elements and compounds. PREREQ: high school chemistry and either a minimum score of 20 on the ACT math section or equivalent; OR a $C$ or better in CHE 102, OR placement. A general education course (natural sciences). COREQ: CHE 120L.

CHE 120L General Chemistry Laboratory I $(0,3,1)$ Experiments describing principles of chemistry as well as those describing physical and chemical properties of elements and compounds. A general education course (natural sciences). COREQ: CHE 120.

CHE 121 General Chemistry II $(3,0,3)$ Continuation of CHE 120. Enrollment in CHE 121L is strongly encouraged but is not required. A general education course (natural sciences). PREREQ: C or better in CHE 120.

CHE 121L General Chemistry Laboratory II $(0,3,1)$ Continuation of CHE 120L. PREREQ: $C$ or better in CHE 120L. PREREQ or COREQ: CHE 121. A general education course (natural sciences).

CHE 292 Introductory Chemical Research (0,0,0) Introduction to chemical research by participating in a special project or original research directed by a member of the chemistry faculty. Course intended for science majors interested in chemistry research but not ready or able to enroll in CHE 492. May only be taken once; pass/fail grade only. PREREQ: consent of instructor.

CHE 305 Main Group Chemistry $(1,0,1)$ Detailed study of the elements found in groups 1,2, 13-18; sources, reactions, representative compounds. PREREQ: C or better in CHE 121.

CHE 310 Organic Chemistry I $(3,0,3)$ Introduction to the chemistry of carbon compounds; bonding, structure, and introductory analysis and synthesis. PREREQ: C or better in CHE 121.

CHE 310L Organic Chemistry Laboratory I ( $0,3,1$ ) Introduction to the laboratory practice of organic chemistry; techniques and separations. PREREQ $C$ or better in CHE 121L. PREREQ: or COREQ: CHE 310.

CHE 311 Organic Chemistry II $(3,0,3)$ Chemistry and properties of organic substances; reactions of functional groups, synthesis, and spectroscopic analysis. PREREQ: C or better in CHE 310.

CHE 311L Organic Chemistry Laboratory II ( $0,3,1$ ) Reactions of organic compounds; identification of unknowns; synthesis. PREREQ: 310L. PREREQ or COREQ: CHE 311.

CHE 320 Inorganic Chemistry $(3,0,3)$ Chemistry of the elements and their compounds; coordination, bioinorganic and materials chemistry. Selected other topics. PREREQ: $C$ or better in CHE 310. COREQ: CHE 320L.

CHE 320L Inorganic Chemistry Laboratory ( $0,6,2$ ) Advanced laboratory synthesis, purification, and characterization of inorganic compounds; application of techniques in primary literature. COREQ: CHE 320.

CHE 325 Organometallic Chemistry (1,2,1) Properties and uses of organometallic compounds; synthesis, purification, and characterization of organometallic compounds using current methods. PREREQ: C or better in CHE 311 and CHE 311L.

CHE 330 Chemistry of Materials $(1,2,1)$ Introduction to the chemistry of materials. Structure-property relations, including self-organization, magnetic properties, and nanostructures. Introduction to characterization methods used in the chemistry of materials. PREREQ: C or better in CHE 121.

CHE 340 Analytical Chemistry $(2,0,2)$ Chemical and stoichiometric principles; gravimetric, volumetric, and spectrophotometric analysis. PREREQ: $C$ or better in CHE 121. COREQ: CHE 340L.

CHE 340L Analytical Chemistry Laboratory $(0,6,2)$ Quantitative determination of the elements; traditional chemical methods and some instrumental methods of analysis. PREREQ: CHE 121L. COREQ: CHE 340.

CHE 350 Instrumental Analysis (2,0,2) Analytical techniques involving modern chemical instruments. PREREQ: CHE 340-340L. COREQ: CHE 350L.

CHE 350L Instrumental Analysis Laboratory $(0,6,2)$ Experiments designed to familiarize students with modern analytical instruments. COREQ: CHE 350.

CHE 360 Physical Chemistry I $(3,0,3)$ Classical thermodynamics, reaction equilibria, phase equilibria, and electrochemical systems. PREREQ: C or better in CHE 121 and MAT 229 or equivalent. PREREQ: or COREQ: PHY 222 or 213.

CHE 361 Physical Chemistry II $(3,0,3)$ Kinetic molecular theory of gases, chemical kinetics, transport processes, elementary quantum chemistry, and spectroscopy. PREREQ: CHE 360 and PHY 222 or 213.

CHE 362L Physical Chemistry Laboratory $(0,6,2)$ Experiments in thermodynamics, chemical kinetics, transport properties, spectroscopy, and elementary quantum chemistry. PREREQ or COREQ: CHE 361.

CHE 365 Molecular Modeling (1,2,1) Introduction to computer-based molecular modeling using molecular mechanics, molecular orbital theory, and density functional theory. Calculation of equilibrium and transition-state geometries, spectroscopic properties, and reaction energies. Modeling of structures of biopolymers and docking of ligands into protein binding sites. PREREQ: C or better in CHE 310.

CHE 391W Chemical Writing and Information (3,0,3) Use and analysis of chemical information sources. Emphasis on specific writing methods used in chemistry such as abstracts, reports, grants and grant reviews. A general education course (natural sciences). PREREQ: Chemistry major and one upper division CHE course.

CHE 392 Advanced Laboratory Projects (1-3 sem. hrs.) The study of published syntheses and other chemical reactions and experiments to develop usable protocols, procedures, or laboratory experiments. Directed by a member of the chemistry faculty. May be repeated for different lab courses for a total of no more than three credit hours. May not be used for the chemistry minor. PREREQ: consent of instructor.

CHE 394 Topics in Chemistry (1-3 semester hours) Various topics of interest in chemistry. Can be repeated for up to 6 hours as topics vary. PREREQ: C or better in CHE 310 or consent of instructor.

CHE 396 Practicum: Chemistry Lab (1,0,1) Participation in planning, teaching, and testing in a designated undergraduate chemistry laboratory course. Designed especially for students majoring in chemistry and in science education. Up to 2 semester hours may be earned in this course. Does not count toward a minor in chemistry. PREREQ: consent of instructor and completion of the designated laboratory course with a grade of $B$ or better.

CHE 399 Independent Study: Readings in Chemistry (1-3 sem. hrs.) Independent survey of literature; written reports on selected topics. Repeatable for a maximum of 4 semester hours. PREREQ: 20 semester hours of chemistry and consent of instructor.

CHE 400 Chemistry Seminar $(1,0,1)$ Use of chemical literature searching and analysis techniques to prepare and present seminars and written reports. PREREQ: CHE 391W and an additional 20 semester hours of chemistry.

CHE 410 Spectrometric Identification of Compounds (2,0,2) Interpretation of data obtained by mass spectrometric analysis and by infrared, ultraviolet/visible, and nuclear magnetic resonance spectroscopic analyses as applied to the establishment of structure. PREREQ: C or better in CHE 310.

CHE 440 Environmental Chemistry $(3,0,3)$ Chemistry as it applies to environmental problems and their solutions; analytical methods, energy needs, and biochemical application. PREREQ: C or better in CHE 311 and CHE 340.

CHE 482 Biochemistry I $(3,0,3)$ Introduction to the chemistry of the molecules of life: carbohydrates, proteins, lipids; protein structure and function; enzyme mechanism; membrane structure and function; introduction to metabolism. Same as BIO 482. PREREQ: C or better in CHE 311.

CHE 482L Biochemistry I Laboratory ( $0,3,1$ ) Introduction to basic laboratory techniques and concepts in biochemistry, such as the preparation of buffers, spectroscoptic determination of protein concentration, gel electrophoresis, column chromatography, and enzyme kinetics. Same as BIO 482L. PREREQ or COREQ: CHE 482 or BIO 482.

CHE 483 Biochemistry II $(3,0,3)$ Metabolism, biosynthesis of cell components, nucleic acid replication, protein synthesis, DNA recombination, hormone action. Same as BIO 483. PREREQ: C or better in CHE 482 or BIO 482.

CHE 483L Advanced Biochemistry II Laboratory ( $0,3,1$ ) Application of modern biochemical techniques in a research setting. Students will conduct experiments on various topics from defined categories, prepare a detailed plan using the scientific literature, perform the experiments independently, and present their findings in a formal report and poster presentation. Same as BIO 483L. PREREQ or COREQ: CHE 483 or BIO 483.

CHE 492 Research: Chemistry (1-3 sem. hrs.) Special project or original research directed by a member of the chemistry faculty. Most projects require at least two semesters of work. Upon agreement of student, instructor, and chair, some of the work may be completed outside of the normal semester calendar. Repeatable for a combined maximum of 12 semester hours. PREREQ: Consent of both instructor and chair of chemistry. Does not apply toward a minor in chemistry.

CHE 505 The History of Chemistry (2-3,0,2-3) Survey of chemistry's significance in ancient and modern times. Investigation of key individuals and concepts in chemistry of the past and present. PREREQ: CHE 310.

CHE 511 Advanced Organic Synthesis (3,0,3) Analysis and design of complex syntheses, including total synthesis of natural products; stereochemical aspects of synthesis; asymmetric synthesis; spectroscopy in structure elucidation. PREREQ: C or better in CHE 311.

CHE 512 Physical Organic Chemistry $(3,0,3)$ Current topics in spectroscopy, reaction mechanisms, and structure function correlations. PREREQ: CHE 360 and a C or better in CHE 311.

CHE 540 Electrochemistry $(3,0,3)$ Theory and experimental applications of elec-tro- analytical methods. PREREQ: CHE 350 and CHE 361.

CHE 560 Quantum Mechanics ( $3,0,3$ ) Principles of quantum mechanics, the hydrogen atom, variational methods, and simple perturbation theory. Same as PHY 460. PREREQ: CHE 361 or PHY 361.

CHE 594 Topics in Chemistry (1-3 sem. hrs.) Discussion of topics in analytical, environmental, inorganic, nuclear, organic, and physical chemistry; chemistry related topics: laboratory experience with operation and application of instruments and the computer. May be repeated as topics vary. PREREQ: consent of instructor.

## Chinese CHI

CHI 101 Elementary Chinese I $(3,1,4)$ Basic skills in pronunciation, conversation, reading, and writing in pinyin (romanized Chinese) and ideograms traditional and simplified. A general education course (humanities or non-western).

CHI 102 Elementary Chinese II $(3,1,4)$ Continuation of CHI 101; additional practice in conversation, pronunciation, reading, writing, and use of ideograms. A general education course (humanities or non-western). PREREQ: CHI 101 or equivalent.

CHI 201Intermediate Chinese I $(3,0,3)$ Review and extension of basic language skills learned in CHI 101 and CHI 102; reading and discussion of cultural, linguistic, and literary subjects. A general education course (humanities or nonwestern). PREREQ: CHI 102 or equivalent.

CHI 202 Intermediate Chinese II $(3,0,3)$ Continuation of grammar review and enhancement of language skills begun in CHI 201; consideration of cultural, linguistic, and literary subjects. A general education course (humanities or nonwestern). PREREQ: CHI 201 or equivalent.

CHI 350 Methods of Teaching Chinese $(3,0,3)$ Theoretical and practical considerations of teaching Chinese in American schools; required of all students seeking teaching certification in Chinese. PREREQ: CHI 202 or equivalent.

CHI 380 Topics in Advanced Chinese $(3,0,3)$ Advanced study of Chinese language, literature, and culture. May be repeated for credit when topics vary. PREREQ: CHI 202 or consent of instructor.

CHI 520 Readings in Chinese $(3,0,3)$ Various literary, linguistic, cultural, and pedagogical topics. May be repeated for credit when topic varies. PREREQ: CHI 380 or equivalent.

## Civic Engagement

## CIV

CIV 101 Introduction to Civic Engagement Scholars $(0,0,1)$ This is the introductory course for the Undergraduate Certificate in Civic Engagement. Students explore how the idea of civic engagement intersects with their academic interests and programs. In addition, students will create a learning contract that will guide their work in the Certificate of Civic Engagement and Civic Engagement Scholars program.

CIV 499 Civic Engagement Scholars Capstone $(3,0,3)$ This is the capstone experience for the Undergraduate Certificate in Civic Engagement an the Civic Engagement Scholars program. Students will be involved in a community based learning experience which may include service learning, research and/or an internship to compliment their previous academic work in civic engagement. Details for individual projects will be determined and agreed to by the student, faculty advisor and Director of Service Learning Programs. PREREQ: CIV 101.

## Communication Studies <br> CMST

CMST 101 Principles of Speech Communication $(3,0,3)$ Development of understanding of the oral communication process; aid in improving oral communication skills; idea and message development; effective delivery of ideas; Offered every semester. A general education course (oral communication). A prerequisite to all other CMST courses.

CMST 101H Honors Principles of Speech Communication (3,0,3) Development of understanding of the oral communication process; aid in improving oral communication skills; idea and message development; effective delivery of ideas; Offered every semester. A general education course (oral communication).

CMST 201 Principles of Effective Listening (3,0,3) Understanding of listening behavior; methods of improving listening skills. PREREQ: CMST 101.

CMST 220 Interpersonal Communication $(3,0,3)$ Theories and skills of dyadic interaction in professional and personal contexts; perception, self-concept, nonverbal communication, listening, assertiveness, relationships, conflict management and problem solving. PREREQ: CMST 101.

CMST 230 Small Group Communication ( $3,0,3$ ) Theories and activities that increase understanding and skills of communication in groups; decision-making, problem-solving, leadership, listening, cohesiveness, climate-setting, conflict, management, groupthink, and systems theory. PREREQ: CMST 101.

CMST 300 Research Methods in Communication Studies (3,0,3) Course provides an overview of the concepts, methods, and tools by which research in Communication Studies is designed, conducted, interpreted, and critically evaluated. The course will specifically examine quantitative and qualitative research procedures, research question and hypothesis generation and testing, measurement, sampling, research design, and data analysis techniques. PREREQ: CMST 101

CMST 303 Organizational Communication ( $3,0,3$ ) Organizational communication theories, models, and processes with practical application of these principles in organizational communication speaking exercises; management and leadership communication skills. PREREQ: CMST 101.

CMST 305 Rhetorical Criticism $(3,0,3)$ Principles and methods of rhetorical criticism as it relates to a variety of rhetorical artifacts. PREREQ: CMST 101

CMST 310 Argumentation (3,0,3) Research organization and argument development and testing, regulation, and cross-examination of a controversial issue. PREREQ: CMST 101.

CMST 315 Women in Communication $(3,0,3)$ Course explores the communication and lives of the early feminists who were involved in the abolitionist, temperance, and suffrage movements. Students will learn and understand the importance of these women in relation to contemporary gender issues and barriers through rhetorical analyses of these female leaders’ original speech texts. PREREQ: CMST 101.

CMST 320 Advanced Interpersonal Communication (3,0,3) Theories, research, and issues relevant to human interaction and interpersonal relationships. PREREQ: CMST 220.

CMST 330 Political Communication ( $3,0,3$ ) Communication strategies and tactics employed by candidates seeking public office; political audiences, campaign phases, political debates, political language, advertising campaigns, media coverage, and campaign speeches. PREREQ: CMST 101.

CMST 335 Communication and Conflict $(3,0,3)$ Theories and strategies of communication will be examined to help explain how people behave in conflict and suggest means of improving communication in order to facilitate a more collaborative process and the production of win-win outcomes. PREREQ: CMST 101.

CMST 340 Strategies of Persuasion ( $3,0,3$ ) Persuasion theory practice, and ethics in preparing and presenting persuasive messages and campaigns. PREREQ: CMST 101.

CMST 345 Family Communication $(3,0,3)$ Course explores the communication processes associated with families. Students will examine theories of communication and family life cycles, different family forms, understudied families, power and conflict in families, and communication and stress in families. PREREQ: CST 101.

CMST 355 Cross-Cultural Communication ( $3,0,3$ ) Theory, criticism, and practice of cross-cultural communication, individual experience in communicating interculturally, and strategies in cross-cultural communication situations. PREREQ: CMST 101.

CMST 360 Interviewing $(3,0,3)$ Theory and principles related to a variety of interviewing settings; employment, information, and advising; role of interviewer and interviewee; use of role playing; outside class exercises such as real inter-
views and written reports. Same as JOU 360 and RTV 365. PREREQ: CMST 101.

CMST 370 Advanced Public Speaking (3,0,3) Organization, style and delivery of speeches for social occasions, non-classroom settings, and complex setting; speech writing. PREREQ: CMST 101.

CST 394 Special Topics in Speech Communication (3,0,3) Focused study of a specific and significant topic from a communication orientation. Topics vary from semester to semester. May be repeated once for credit.

CMST 396 Internship: Speech $(0,12,3)$ Selected placement of qualified students in off-campus speech communication related professions; experience in corporate training, speech writing, interviewing, sales, and groups, communication. PREREQ: written consent of supervising faculty member; junior or senior standing; and a GPA of at least 2.75 .

CMST 400 Contemporary Public Address $(3,0,3)$ Contemporary speakers and speeches as they relate to social and political issues such as personal vindication, national security, war and peace, and civil rights. PREREQ: CMST 101.

CMST 410 Rhetorical Theories $(3,0,3)$ Theories of principal rhetoricians from ancient to modern times; classical, British, and contemporary periods of rhetoric. PREREQ: CMST 101

CMST 430 Communication Theories $(3,0,3)$ Theories of interpersonal, group, public, and mass communication; historical developments, paradigms, and research that shape communication theory construction. Same as JOU 430 and RTV 430. PREREQ: CMST 101

CMST 440 Communication Training and Development (3,0,3) Instruction in design and delivery of communication training programs for specific business contexts; adult learning principles, proposal development, needs assessments, presentation skills, audio/visual aids, and evaluation procedures. PREREQ: CMST 101 and junior standing.

CMST 499 Independent Study (1-3 sem. hrs.) Individually supervised work involving reading, research. Topic is selected before registration in conference with instructor. May be repeated for maximum of 6 semester hours. PREREQ: junior or senior majoring or minoring in speech; a GPA of at least 2.50 or consent of instructor; approved independent study proposal.

## Cinema Studies CIN

CIN 200 Introduction to Cinema Studies $(3,0,3)$ Basic elements of movie form, narrative structure, and style; concepts of genre; strategies of analyzing and writing about cinema. PREREQ: ENG 101 or ENG 151 or equivalent.

CIN 201 Survey of World Cinema ( $3,0,3$ ) Origins and development of cinema as an international medium of expression. Relation of form and content to specific global cultures and contexts. PREREQ: ENG 101 or ENG 151 or equivalent.

CIN 202 Survey of U.S. Cinema $(3,0,3)$ Origins and development of cinema as a multicultural medium of expression in the U.S. Relation of form and content to historical, economic, and cultural development in the U.S. PREREQ: ENG 101 or ENG 151 or equivalent.

CIN 494 Studies in Cinema (3,0,3) Advanced study of a particular genre, national cinema, director, or other topic in cinema studies. May be repeated for credit when topics vary. PREREQ: CIN 200 or CIN 201 or CIN 202.

## Computer Information Technology CIT

CIT 140 Introduction to Computer Information Technology (3,0,3) Introduction to terminology and domain of computer information technology including hardware components and software applications. Overview of the role of networks, the WWW, operating systems, security and programming in information systems with a focus on the common problems faced in these domains and effective problem solving techniques that are applied. PREREQ: $C$ or better in MAH 099 or placement.

CIT 141 PC/Networking Fundamentals $(2,1,3)$ This course provides an introduction to the information required to assemble and troubleshoot computers and networks. Students will learn how to properly install, configure, upgrade, troubleshoot, and repair PC hardware and common software. Hands-on experience with the components and software studied in the course will be provided. PREREQ: C or better in MAH 099 or placement.

CIT 299 Directed Study (1-3,0, 1-3) Directed study. PREREQ: consent of instructor.

CIT 301 Web Programming (3,0,3) Design of interactive web applications and web sites containing dynamic content; software design for web-based clientserver applications and database interaction; client-side and server-side techniques; language-specific design issues. PREREQ: C or better in INF 260 and INF 286.

CIT 370 Systems Administration (3,0,3) Examination of modern operating systems including memory, processor, device, file, and network management. Introduction to system administration via an operating system case study. PREREQ: C or better in INF 110 or 120 and CIT 140. PREREQ or CO-REQ: INF 284.

CIT 380 Securing Computer Systems $(3,0,3)$ An introduction to the concepts and technologies of computer security, with a focus on the practical aspects of securing computers, including common security threats and computer crime, authentication, cryptography, malware, operating systems security, and network security, and network security. PREREQ: C or better in CIT 370.

CIT 383 Administrative Scripting (3,0,3) Programming in a dynamically typed scripting language, including interfacing to operating system and network services and automation of common system administration tasks. PREREQ: $C$ or better in INF 260 and CIT 370.

CIT 384 Network Design/Troubleshooting $(3,0,3)$ Network and transport protocols (IP, TCP, UDP); hubs, switches, and routers; Network topologies, subnetting, and routing, including VLANs; capacity planning and redundancy; network troubleshooting using cable testers and network sniffers. PREREQ: INF 284.

CIT 386 Web Server Administration (3,0,3) An applied, practical introduction to web and database administration; installing and configuring a web a server; name resolution; web server security and maintenance; server-side technologies; database creation; storage management; performance tuning; backup and recovery; security management. PREREQ: C or better in INF 286 and CIT 370.

CIT 394 Intermediate Topics: Computer Information Technology (3,0,3) Various topics in Computer Information Technology. PREREQ: varies with topic (see Schedule of Classes).

CIT 399 Independent Study (1-3, 0, 1-3) Directed study. PREREQ: consent of instructor.

CIT 430 Computer Forensics $(\mathbf{3 , 0 , 3})$ Fundamentals of computer and network forensics; forensic duplication and analysis; reconstruction of computer activities; forensics tools. PREREQ: C or better in CIT 380.

CIT 470 Advanced Network and System Administration (3,2,4) Administering a networked computer system. Account, network configuration, security, file system and device management. Writing administrative scripts. PREREQ: $C$ or better in CIT 370 and INF 384.

CIT 472 Database Administration (3,0,3) An applied, practical introduction to database administration; PL/SQL, installing and configuring a database server; create and configure a database instance; user management and security; backup and monitoring activities. PREREQ: C or better in INF 282 and CIT 370.

CIT 484 Network Security $(3,0,3)$ Firewalls and intrusion detection systems; incident response; security protocols and VPNs; network server security; viruses and worms; wireless security basics. Network security architecture and policy development. PREREQ: Grade of C or better in CIT 380 and CIT 384.

CIT 486 Three Tier Web Applications (3,0,3) Design and implementation of a web site and its database backend. Client-side, database server-side, and web
server issues associated with such a three-tier implementation will be investigated. PREREQ: C or better in CIT 282 and CSC 301.

CIT 494 Advanced Topics: Computer Information Technology (3,0,3) Various advanced topics in Computer Information Technology. PREREQ: varies with topic (see Schedule of Classes).

CIT 496 Senior Practicum $(3,0,3)$ Students will work on information technology projects that allow them to integrate academic knowledge to real world situations. All placements require prior approval of instructor. PREREQ: CIT major, senior standing and approval of instructor.

CIT 499 Advanced Independent Study (1-3, 0, 1-3) PREREQ: consent of instructor.

CIT 520 Managing Computer Systems $(3,2,4)$ The setup, configuration, and administration of networked computer systems. Current personal computer operating system technology. Hardware installation and troubleshooting. PREREQ: EDG 602 or senior standing in Business Education, Organizational Systems Technology, or Organizational Leadership degree programs. PREREQ: CIT 580.

CIT 570 Systems Administration (3,0,3) Examination of modern operating systems including memory, processor, device, file, and network management. Introduction to system administration via an operating system case study. PREREQ: Admission to the Graduate Information Security Certificate Program or permission of instructor.

CIT 580 Securing Computer Systems $(3,0,3)$ An introduction to the concepts and technologies of computer security, with a focus on the practical aspects of securing computers, including common security threats and computer crime, authentication, cryptography, malware, operating systems security, and network security. PREREQ: MSIS 640 or regular admission to the MSCS program.

## Computer Science <br> CSC

CSC 270 Mathematics Software Programming (3,0,3) Programming and problem solving with a high-level mathematical software package; variables, control, modularity, processing of lists and vectors; recursion; visualization of functions; basic numerical and symbolic computation; simulation. PREREQ: $C$ or better in MAT 121.

CSC 299 Directed Readings/Independent Study (1-3 semester hours) PREREQ: consent of instructor.

CSC 301 Web Programming ( $3,0,3$ ) Design of interactive web applications and web sites containing dynamic content; software design for web-based clientserver applications and database interaction; client-side and server-side techniques; language specific design issues. PREREQ: $C$ or better in INF 260, and INF 286.

CSC 325 Introduction to Neural Networks and A.I. $(3,0,3)$ Survey of concepts in artificial neural networks for associative memory and learning; software simulations applied to sample problems; logic-based artificial intelligence; approximate reasoning; search concepts and problems, the limits of machine intelligence. PREREQ: INF 260 or BIO 370 or PSY 311, or consent of instructor.

CSC 360 Object-Oriented Programming II $(3,0,3)$ Intermediate object-oriented programming concepts and practice: inheritance, basic graphical user interface elements; introduction to recursion; implementation of linked lists; use of basic container types. PREREQ: C or better in INF 260 and MAT 119.

CSC 362 Computer Systems ( $3,0,3$ ) ANSI C, pointers, pointer arithmetic; dynamic memory allocation; introduction to instruction sets, registers, addressing modes and assembly language; binary representations and bit manipulations; computer organization concepts. PREREQ: $C$ or better in CSC 360.

CSC 364 Data Structures and Algorithms ( $3,0,3$ ) Analysis and efficient implementation of container types such as stacks, queues, hash tables, search trees, and graphs; sorting algorithms. PREREQ: C or better in CSC 360.

CSC 375 Intermediate Topics in Programming (1-3, 0, 1-3) A project-oriented introduction to a contemporary programming language or development platform. PREREQ: varies with topic.

CSC 394 Intermediate Topics: Computer Science (3,0,3) Various topics in computer science. PREREQ: varies with topic (see Schedule of Classes)

CSC 399 Intermediate Directed Readings/Independent Study (1-3 sem. hrs.) PREREQ: consent of instructor.

CSC 402 Advanced Programming Methods $(\mathbf{3 , 0 , 3})$ High-performance OO and generic programming in $\mathrm{C}++$; concurrent and distributed programming; STL; multi-paradigm design patterns; extensive practice with sophisticated programming projects. PREREQ: C or better in CSC 362 and 364.

CSC 407 Concepts of Programming Languages $(3,0,3)$ History of high-level languages; grammars and the compilation process; axiomatic semantics; language design and implementation issues; procedural, object-oriented, functional, and logic programming paradigms; case studies in important contemporary languages. PREREQ: C or better in CSC 362.

CSC 410 Compiler Construction $(3,0,3)$ Lexical analysis; parsing; code generation; compiler project. PREREQ: C or better in CSC 402 and MAT 385.

CSC 425 Artificial Intelligence $(3,0,3)$ Concepts and techniques of artificial intelligence; heuristic search, expert systems, AI languages, natural language processing, and elementary neural networks. PREREQ: C or better in CSC 364.

CSC 433 Computer Networks $(3,0,3)$ Direct link networks, packet switching networks, internet working (IP), end-to-end protocols (TCP), Windows socket programming. PREREQ: C or better in CSC 362 and INF 284.

CSC 440 Software Engineering $(3,1,4)$ Techniques in computer software specification, design, implementation, testing, documentation, and maintenance; development of a large-scale software project by students working in teams. PREREQ: $C$ or better in CSC 402 and senior standing.

CSC 450 Database Management Systems $(3,0,3)$ Design and implementation of relational database applications; implementation of various parts of a relational database management system; Structured Query Language, entity-relationship model, normal forms, concurrency control, crash recovery, indexing, evaluation of relational operators, relational query optimization. PREREQ: $C$ or better in CSC 360 and INF 282.

CSC 460 Operating Systems (3,0,3) Internal structures and algorithms for file systems, I/O, memory management and process scheduling; examples drawn from contemporary operating systems such as UNIX and Windows NT. PREREQ: C or better in CSC 362 and CSC 364.

CSC 462 Computer Architecture (3,0,3) Implementation of control unit and arithmetic-logic unit, microprocessor organization and design, main memory and cache organizations, I/O subsystem; RISC vs. CISC instruction sets, pipelining, parallel processing; mechanisms for evaluating computer architectures and microprocessor performance. PREREQ: C or better in CSC 362.

CSC 464 Design and Analysis of Algorithms $(3,0,3)$ Proofs of time and space bounds on important algorithms; advanced algorithms on graphs, sequences and sets; divide-and-conquer and dynamic programming; randomized algorithms; parallel algorithms. PREREQ: C or better in CSC 364 and MAT 385.

CSC 480 Computer Graphics $(3,0,3)$ Basic concepts of two-and three-dimensional graphics including incremental methods, geometric transformations, windowing and clipping, hidden line and surface algorithms, and animations. PREREQ: C or better in CSC 364 and MAT 234.

CSC 482 Computer Security $(3,0,3)$ Theory and algorithms of computer security, including security policies, access control, secure programming, identity and authentication, information flow, and information assurance techniques. PREREQ: C or better in CSC 360.

CSC 483 Cryptology $(3,0,3)$ Cryptology of classical ciphers, mathematical foundations of cryptology, Hill cipher, DES and AES, cryptography of public key cryptosystems. PREREQ: MAT 225 or CSC 362 or CSC 363.

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CSC 485 Theory of Computation $(3,0,3)$ Regular and context-free grammars; Turing machines; recursive and recursively enumerable languages; uncomputability; the Chomsky hierarchy; complexity classes such as P, NP, and NP-complete. PREREQ: C or better in MAT 385.

CSC 486 Three Tier Web Applications (3,0,3) Design and implementation of a web site and its database backend. Client-side, database server-side, and web server issues associated with such a three-tier implementation will be investigated. PREREQ: C or better in INF 282 and CSC 301.

CSC 493 Research Seminar in Computer Science (1-3, 0, 1-3) Examination and presentation of contemporary research work in computer science. PREREQ: $C$ or better in MAT 385 and CSC 364, and consent of instructor.

CSC 494 Advanced Topics: Computer Science $(3,0,3)$ Various advanced topics in computer science. PREREQ: varies with topic (see Schedule of Classes).

CSC 499 Advanced Directed Readings/Independent Study (1-3 semester hours) PREREQ: consent of instructor.

CSC 501 Intermediate Programming Workshop (3,0,3) Intensive review of programming and data structures from an object-oriented perspective using the C++ language. Intended for students whose computer programming skills need refreshing or updating. PREREQ: graduate standing; background in computer programming and data structures.

CSC 502 Advanced Programming Methods (3,0,3) High-performance OO and generic programming in C++; concurrent and distributed programming; STL; multi-paradigm design patterns; extensive practice with sophisticated programming projects. PREREQ: Regular admission to MSCS program.

CSC 507 Concepts of Programming Languages (3,0,3) History of high-level languages; grammars and the compilation process; axiomatic semantics; language design and implementation issues; procedural, object-oriented, functional, and logic programming paradigms; case studies in important contemporary languages. PREREQ: Regular admission to MSCS program.

CSC 510 Compiler Construction $(3,0,3)$ Lexical analysis; parsing; code generation; compiler project. PREREQ: Regular admission to MSCS program.

CSC 525 Artificial Intelligence $(3,0,3)$ Concepts and techniques of artificial intelligence; heuristic search, expert systems, AI languages, natural language processing, and elementary neural networks. PREREQ: Regular admission to MSCS program.

CSC 533 Computer Networks (3,0,3) Direct link networks, packet switching networks, internet working (IP), end-to-end protocols (TCP), Windows socket programming. PREREQ: Regular admission to MSCS program.

CSC 540 Software Engineering $(3,1,4)$ Techniques in computer software specification, design, implementation, testing, documentation, and maintenance; development of large-scale project by students working in teams. PREREQ: Regular admission to MSCS program and CSC 502.

CSC 550 Database Management Systems (3,0,3) Database design, normal forms, concurrent processing, recovery, security, relational model, Structured Query Language, hierarchical and network models. PREREQ: Regular admission to MSCS program.

CSC 560 Operating Systems $(3,0,3)$ Internal structures and algorithms for file systems, I/O memory management and process scheduling; examples drawn from contemporary operating systems such as Unix and Windows. PREREQ: Regular admission to MSCS program.

CSC 562 Computer Architecture (3,0,3) Implementation of control unit and arithmetic-logic unit, microprocessor organization and design, main memory and cache organizations, I/O subsystem; RISC vs. CISC instruction sets, pipelining, parallel processing; mechanisms for evaluating computer architectures and microprocessor performance. PREREQ: Regular admission to MSCS program.

CSC 564 Design and Analysis of Algorithms $(3,0,3)$ Proofs of time and space bounds on important algorithms; advanced algorithms on graphs, sequences and
sets; divide-and-conquer and dynamic programming; randomized algorithms; parallel algorithms. PREREQ: Regular admission to MSCS program.

CSC 580 Computer Graphics $(3,0,3)$ Basic concepts of two- and three-dimensional graphics including incremental methods, geometric transformations, windowing and clipping, hidden line and surface algorithms, and animations. PREREQ: Regular admission to MSCS program and MAT 234 or equivalent.

CSC 582 Computer Security $(3,0,3)$ Theory and algorithms of computer security, including security policies, access control, secure programming, identity and authentication, information flow, and information assurance techniques. PREREQ: Regular admission to MSCS program.

CSC 584 Cryptography $(3,0,3)$ Cryptology of classical ciphers, DES and AES, public key cryptosystems, authentication and cryptographic hash functions. PREREQ: consent of instructor.

CSC 585 Theory of Computation (3,0,3) Regular and context-free grammars; Turing machines; recursive and recursively enumerable languages; uncomputability; the Chomsky hierarchy; complexity classes such as P, NP, and NP-complete. PREREQ: Regular admission to MSCS program.

CSC 593 Research Seminar: Computer Science (1-3,0,1-3) Examination and presentation of contemporary research work in computer science. PREREQ: Regular admission into MSCS program.

CSC 594 Intermediate Graduate Topics: Computer Science (3,0,3) Various advanced topics. PREREQ: Regular admission to MSCS program and consent of instructor.

CSC 599 Intermediate Independent Study (1-3,0, 1-3) PREREQ: Regular admission to MSCS Program, consent of instructor.

## Construction Management <br> CMGT

CMGT 101 Introduction to Construction Management (3,0,3) An introduction to construction occupations, terminology, delivery systems, and procedures; interpretation of working drawings, specifications, and construction contracts.

CMGT 120 Construction Materials (3,0,3) Properties and characteristics of materials used in modern construction, including concrete, metals, masonry, wood, ceramics, and synthetics.

CMGT 121 Construction Processes $(2,2,3)$ Methods and techniques used to construct commercial and residential structures.

CMGT 122 Architectural Design and Drafting (1,2,2) Techniques and procedures used in designing and drafting working drawings for residential structures. PREREQ: CMGT 101.

CMGT 220 Plane Surveying ( $2,2,3$ ) Procedures; care and operation of surveying instruments and equipment; generation and interpretation of field data; computation and site layout. PREREQ: MAT 119.

CMGT 222 Architectural CAD (1,2,2) Introduction to Architectural CAD AEC software; drawing, dimensioning editing, layering, setting defaults, 3D pictorials, and plotting. Students will generate a complete set of architectural drawings as their project. PREREQ: CMGT 122.

CMGT 301 Cooperative Education in Construction Management (3 sem. hrs.) Supervised, objective based work experience related to a student's technology major. Coordinated by employer, faculty, coop coordinator, and student. Minimum of 20 hours on the job per week. Open to all students majoring in technology; may be repeated up to 9 semester hours. Apply to the Department of Construction Management and Organizational Leadership Office of Cooperative Education. PREREQ: CMGT 222

CMGT 303 Construction Specifications and Estimating (3,0,3) Introduction to and interpretation of contract documents used in construction including specifications and project manuals. An introduction to basic estimating practices, bidding procedures, and contracts are discussed. PREREQ: CMGT 120, 122 and 301.

CMGT $305 \mathrm{M} / \mathbf{E} / \mathbf{P}$ Systems I $(3,0,0)$ The study of fundamental principles and materials of electrical, plumbing, and HVAC systems are studied. The comprehension of electrical and mechanical construction plans and specifications is emphasized. PREREQ: CMGT 222 and 301.

CMGT 306 M/E/P Systems II $(3,0,0)$ The comprehension and selection of electrical, plumbing, and HVAC systems are studied. Principles of code, design theory, methods, and materials are applied to electrical plumbing, heating, ventilation, and air conditioning systems for buildings. The comprehension of electrical and mechanical construction plans and specifications is emphasized. PREREQ: CMGT 305.

CMGT 320 Construction Estimating (3,0,3) Interpretation of construction drawings and specifications; estimating quantities, cost of materials, and labor costs; work methods; job planning; project scheduling and control; field administration; management procedures of contracting. PREREQ: CMGT 303
.CMGT 322 Structural Design $(3,0,3)$ Structural design and procedures to conform with current practice and industry recommended specifications and design standards for steel, wood, and reinforced concrete. PREREQ: CMGT 222 and 301; MAT 119.

CMGT 323 Land Planning and Development (2,2,3) Practices in land planning and subdivision design; subsurface utility systems; environmental considerations. PREREQ: CMGT 220, CMGT 222. and CMGT 303.

CMGT 324 Construction Project Scheduling $(3,0,3)$ Subject matter and "simulated hands on" experiences in all phases of current construction project coordination and documentation. PREREQ: CMGT 320.

CMGT 325 Construction Safety $(3,0,3)$ Construction safety and regulatory agencies; understanding of 29 CFR 1926 standards; elimination of construction site hazards. PREREQ: CMGT 120and 301.

CMGT 328 Soil Technology and Foundation Design (2,2,3) Understanding the various types of soils, their stability and strengths and with this information understanding the design of soil stabilization and the structural concepts of foundations and substructures. PREREQ: CMGT 220, CMGT 222, and CMGT 303.

CMGT 383 Advanced Technical Study (1-3 sem. hrs.) Participation in an employer based technical study program, in a technical seminar, or in a company based practicum. Supervision arranged by the instructor and the agency sponsoring the program. Application must be made with instructor in semester preceding experience. Forty hours of work for each semester hour. PREQ: CMGT 222.

CMGT 399 Independent Study in Construction Management (1-3,0,1-3) For advanced students seeking to study selected problems. PREREQ: consent of department chair.

CGMT 400 Building Codes $(3,0,3)$ IBC/IRC, Understanding the application of the national building codes for residential (RBC) and commercial building codes (IRC). PREREQ: CMGT 303.

CMGT 413 Drafting in Specialized Fields $(2,2,3)$ Modern procedures and techniques; new developments, specialized fields, and processes. PREREQ: CMGT 222.

CMGT 415 Construction Management (3,0,3) Principles of construction management applied to a construction project; site facilities planning, procurement, shop drawings and submittals, scheduling, coordinating and tracking subcontracts, tracking change orders, and job cost. PREREQ: CMGT 324.

CMGT 424 Capstone: Construction Restoration and Renovation (2,2,3) Procedures and techniques for renovating and restoring residential and commercial structures; identifying classical architecture; guidelines for historic preservation; preparation of documents, contracts, drawings, and specifications for renovation of an historic structure. Should be completed within the last 20 semester hours of CMGT program. PREREQ: CMGT 322 and CMGT 324.

CMGT 426 Heavy Construction Techniques and Analysis (3,0,3) Latest concepts, procedures, and techniques used in analyzing the processes of heavy construction. PREREQ: CMGTT 220, CMGT 303, and CMGT 222.

CMGT 427 Construction Law and Legal Contracts $(3,0,3)$ Contract law principles, mechanics liens, tort law, labor and employment law, insurance and suretyship, arbitration, and contract license law. PREREQ: CMGT 303

CMGT 429 Civil Design $(2,2,3)$ Principles of civil system design, construction, and processes; including roadways, underground utilities, retention and detention structures, traffic engineering, and regulations. PREREQ: CMGT 220, CMGT 222, and CMGT 320.

CMGT 430 Design/Building (3,0,3) Major commercial/industrial contractors and their customers want building on a fast tract. The design of the building is taking place as the building as the building is being built. Construction design techniques and procedures of fast track building. PREREQ: CMGT 320 and CMGT 328.

CMGT 431 Capstone: Commercial and Residential $(2,2,3)$ Techniques used in the development of the design of a commercial and/or resident structure, civil design of site using the specifications, structural, electrical/mechanical, estimating, and project planning concept. Resident project content will parallel closely competition project requirement for the National Homebuilders Contest. Community involvement stressed. Should be completed within last 20 semester hours of CMGT program. PREREQ: CMGT 322, CMGT 324, CMGT 400, CMGT 429 and CMGT 430.

CMGT 494 Seminar: Construction Management $(3,0,3)$ Readings and discussion of critical questions. Topics vary according to interests and needs of students. May be repeated two times (6 sem. hrs.). PREREQ: CMGT 222.

## Dance <br> DAN

DAN 120 Ballet I ( $0,2-4,3$ ) Introduction to technique for students with little or no dance training.

DAN 220 Ballet II (0,2-4,3) Intermediate level. PREREQ: consent of instructor or chair.

DAN 221 Modern Dance I (0, 2-4, 3) Beginning level.

DAN 222 Jazz Dance I (0,2-4,3) Introduction to jazz dance technique. For students with little or no jazz dance training. PREREQ: DAN 120

DAN 224 Tap Dance I $(0,2,2)$ Introduction to tap dance technique. No previous training necessary.

DAN 226 Foundation Seminar (0-2-6,2) Execute corrective exercise by strengthening muscle tissue and skeletal connections, learning technical skills essential for all areas of dance; analyze movement strategies for proper body alignment. May be repeated for a maximum of 4 hours. PREREQ: 2 DAN classes and consent of instructor or chair.

DAN 227 Special Topics in Dance (0-2,2-4,2-6) Opportunity for introductory work in specialized topics related to student's areas of concentration. Can be repeated for credit up to 9 hours.

DAN 321 Modern Dance II (0,2-4,3) Intermediate level. PREREQ: DAN 221 or consent of instructor or chair.

DAN 322 Jazz Dance II (0,2-4,3) Intermediate level. PREREQ: DAN 222 or consent of instructor or chair.

DAN 323 Physiology of Dance $(2,1,3)$ Provides an explanation of dance kinesiology for the dancer. Emphasis is placed on the actions of the muscles, implications of joint mechanics for technique, dance terminology, specific exercises and discussion of dance injury.

DAN 324 Tap Dance II (0,2-4,3) Dance work in tap dance: audition and performance preparation; techniques in choreography. PREREQ: DAN 224 or consent of instructor or chair.

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DAN 326 Advanced Dance Seminar I (2-4, 2-6 each) Advanced work in dance (all genres may be explored) for students majoring in theatre and skilled dancers. PREREQ: consent of instructor or chair.

DAN 375 Choreography ( $3,3,3$ ) Interpretations of ballets and stage musicals as expressed in movement and dance. PREREQ: 6 semester hours of dance or consent of instructor or chair.

DAN 426 Advanced Dance Seminar II (0-2, 2-4, 2-6) More advanced level of dance training (all genres may be explored) for students majoring in theatre and for skilled dancers; all genres. May be repeated for credit. PREREQ: consent of instructor or chair.

DAN 427 Dance History ( $3,0,3$ ) Major contributing forces, key figures, and styles that helped form contemporary dance today. PREREQ: 6 semester hours of dance.

DAN 428 Special Problems in Dance ( $0,2-6,3$ ) Opportunity for additional advanced work in the dance student's area of concentration. The studio technique allows the student to choose from among electives in specific areas of interest. PREREQ: 3 semester hours of dance.

DAN 599 Individual Studies in Dance (0,1-3,1-3) Individual creative or research projects in one or more areas of dance: ballet, Tap, Jazz, Modern, Musical Theatre, or dance history. Projects directed by TAR/DAN faculty must be approved prior to registration. May be repeated for up to nine hours credit.

## Economics ECO

ECO 200 Principles of Macroeconomics $(3,0,3)$ Introductory macroeconomics; national income and employment; economic role of government; role of money and banking system; international trade. A general education course (social sciences). PREREQ: sophomore standing and completion of one college-level mathematics course.

ECO 201 Principles of Microeconomics (3,0,3) Individual market behavior in capitalistic economy; role of supply and demand in determination of value and resource allocation; monopoly and its regulation; problems of economic growth; population growth, and environment. A general education course (social sciences). PREREQ: sophomore standing and completion of one college-level course.

ECO 205 Economics for Teachers ( $3,0,3$ ) Examines essential concepts of macroeconomics with an emphasis on concepts appropriate for elementary, middle, and high schools. Not applicable to a major or minor in business. Will not substitute for ECO 200 and/or ECO 201.

ECO 215 Contemporary Economic Issues $(3,0,3)$ Basic principles and structure used in economic decision making; analysis of economic institutions, social issues, and the basic objectives of efficiency, equity, stability, and growth of economic activity. Not applicable to a major or minor in business. Will not substitute for ECO 200 and/or ECO 201. A general education course (social sciences). PREREQ: sophomore standing.

ECO 300 Intermediate Macroeconomics $(3,0,3)$ Theory of economic aggregates; advanced analysis of national income determination and employment; development of policy on inflation, unemployment, and economic growth; the internet and data sources available on the World Wide Web. PREREQ: ECO 200-201, and STA 205 or STA 212.

ECO 301 Intermediate Microeconomics $(3,0,3)$ Theory of optimal price; output and employment decisions of firms under varying market structures; individual and market demand; general equilibrium; case studies of major topics. PREREQ: ECO 200-201, STA 205 or STA 212.

ECO 302 Money and Banking $(3,0,3)$ Role of major financial sectors in determining aggregate supply of money and credit; competing theories on demand for money and their policy implications of the effect of money supply on important economic aggregates. PREREQ: ECO 200-201, STA 205 or STA 212.

ECO 305 International Context for Business (3,0,3) Domestic and global economic environments of organizations; interactions and interrelationships
between the cultural, ethical, social, political, technological, and ecological factors constituting the international context for business. PREREQ: Certified as a business major or declared major in economics.

ECO 310 Introduction to Econometrics (3,0,3) Introduction to economic measurement; review of statistics, theoretical models, analysis of economic data, forecasting and other technical considerations; gathering, analyzing, and presenting economic information. PREREQ: ECO 200-201 and STA 205 or STA 212.

ECO 320 History of Economic Thought $(3,0,3)$ Development of economic theory from the time of ancient Greece to John Maynard Keynes; major economic ideas of past and present and the individuals who developed those ideas. PREREQ: ECO 200-201.

ECO 322 American Economic Development $(3,0,3)$ American economic history; processes of industrialization; widening of markets; extension of transportation communication networks. PREREQ: ECO 200-201.

ECO 330 Regional Economics ( $3,0,3$ ) Application of economic analysis to explain spatial patterns of economic activity within subdivisions of the larger economic system. PREREQ: ECO 200-201.

ECO 332 Public Finance (3,0,3) Determination of optimum level output and distribution of public goods with regard to revenues, expenditures, and debt management; proposals for tax reform, equity in governmental expenditures, and utility regulation. PREREQ: ECO 200-201.

ECO 340 International Economics $(3,0,3)$ Theory of international trade and finance; commercial and financial policies; foreign exchange; international monetary institutions; policies of free and controlled trade; world economic planning. PREREQ: ECO 200-201.

ECO 342 Economic Development $(3,0,3)$ Changing economic circumstances over time; measuring economic development; factors causing economic development; domestic and foreign saving and investment; human capital and productivity; trade policy; exporting; other factors affecting economic development. PREREQ: ECO 200-201.

ECO 344 Comparative Economic Systems (3,0,3) Economic systems in today's world, especially England, France, Germany, the former Yugoslavia, Russia, China, India, Iran, and Saudi Arabia. PREREQ: ECO 200-201.

ECO 350 Labor Economics (3,0,3) Analysis of the functioning of labor markets with theoretical, empirical, and policy applications in determination of employment and wages in the U.S. economy. PREREQ: ECO 200-201.

ECO 394 Topics: Economics (3,0,3) Specialized topics of faculty and student interest. May be repeated twice when topics vary. PREREQ: ECO 200 and 201.

ECO 494 Seminar in Economics (3,0,3) Capstone course for economics majors. Discussion and analysis of contemporary economic problems. Different topics offered each semester. Papers and written assignments ordinarily required. PREREQ: ECO 300-301.

ECO 499 Independent Study in Economics (1-3 sem. hrs.) Directed readings, independent research, or student projects on areas of individual academic interest; topics, meeting times, and outcomes arranged with instructor. PREREQ: ECO 200-201.

ECO 580 Economics for Teachers (1-3 sem. hrs.) A conceptual framework for the study of economics and overview relating to the basic economic problem, economic systems, resource allocation, economic growth and stability, economic institutions, and goals. Foundation course intended for classroom teachers with little or no background in economics. Open only to students majoring in education.

ECO 594 Topics: Teaching Economics (1-3 sem. hrs.) Strategies and activities for teaching economics and selected economic topics at the elementary and secondary levels; instructional resources and their effective use in the classroom; sample curriculum guides; curriculum development activities. May be repeated for credit when topics vary. Open only to students majoring in education.

## Master of Teaching

## EDMT

EDMT 542 Methodology/Pedagogy in Middle School/Secondary Business/ Marketing $(3,0,3)$ Theories, methods/techniques and technologies in designing, delivering and evaluating instruction in middle school and high school business/ marketing.

EDMT 543 Methodology/Pedagogy in Middle School/Secondary Science $(3,0,3)$ Theories, methods, techniques and technologies in designing, delivering and evaluating instruction in middle school and high school science.

EDMT 544 Methodology/Pedagogy in Middle School/Secondary Math (3,0,3) Theories, methods/techniques and technologies in designing, delivering and evaluating instruction in middle school and high school mathematics. COREQ: EDMT 696.

EDMT 545 Methodology/Pedagogy in Middle School/Secondary Social Studies $(\mathbf{3 , 0}, \mathbf{3})$ Theories, methods/techniques and technologies in designing, delivering and evaluating instruction in middle school and high school social studies. COREQ: EDMT 696.

EDMT 599 Special Topics in Education (1-3 semester hours) Individual or group in depth study. PREREQ: consent of MAT coordinator.

## Educational Specialities <br> EDS

EDS 322 Planning and Implementing Instruction for Students with Exceptionalities (2,0,2) Adapting classroom instruction to meet the needs of challenging students; collaboration skills for effective planning for inclusive practices. PREREQ: EDS 360 or PHE 500 or permission of instructor. COREQ: EDU 390 or EDU 391 or EDU 393.

EDS 360 Students with Exceptionalities in the Schools (2,0,2) Nature and needs of students with exceptionalities; overview of educational programming and legal issues in special education. PREREQ: PSY 100.

EDS 362 Applied Behavior Analysis for Students with Disabilities (3,0,3) Principles of behavior analysis and research; classroom examples of behavior applications with students with disabilities. COREQ: EDS 464, EDS 472, and EDS 473.

EDS 364 Characteristics of Learning and Behavior Disorders (3,0,3) Nature and needs of students with learning or behavior disorders; factors to consider in providing appropriate educational programs. PREREQ: EDS 360.

EDS 464 Assessment of Learning and Behavior Disorders (3,2,4) Principles and procedures of assessment for eligibility determination of students with exceptionalalities and monitoring of student progress. PREREQ: EDS 364. COREQ: EDS 362, EDS 473, and EDS 472.

EDS 472 Special Education Methods and Materials (3,0,3) Materials, equipment, and methods for teaching students with learning and behavior disorders. PREREQ: EDS 364 COREQ: EDS 363, EDS 464, and EDS 473.

EDS 473 Special Education Practicum $(0,4,2)$ Experiences in application of assessment, behavior intervention, and instructional methods with students with learning and behavior disorders. COREQ: EDS 362, EDS 464 and EDS 472. Pass/Fail

EDS 561 Mental and Orthopedic Disabilities $(3,0,3)$ Characteristics and educational programs for students who have mental retardation or orthopedic and/or other health impairments.

EDS 562 Early Childhood Special Education Programs (3,0,3) Special needs of handicapped preschool children; adapting preschool programs to accommodate handicapped children. PREREQ: EDS 360 or equivalent.

EDS 570 Working with Families of Students with Disabilities (3,0,3) Information, skills, and resources for effective interaction with parents and families of children with disabilities.

EDS 572 Secondary Special Education Programs $(3,0,3)$ Characteristics of adolescents with learning and behavior disorders; educational programming for secondary students with mild disabilities including student empowerment, lesson adaptations, and transition planning.

EDS 588 Professional Laboratory Experiences (3-6 sem. hrs.) Classroom field experience in added area of certification; individual project. PREREQ: completed coursework for certification; valid teaching certificate.

## Education <br> EDU

EDU 104 Orientation to the Education Profession $(1,0,1)$ The purpose of this course is to explore the education profession and the programs in the College of Education and Human Services. The course is intended for anyone who is interested in becoming a teacher. The course will address the KY New Teacher Standards, the Teacher Education Handbook, various teaching areas, and include a field experience component. Students must complete this course before they can enroll in any other education courses.

EDU 291W Advanced Writing in the Education Professions (3,0,3) Practice in a variety of expository forms; writing formal analytical essays; developing strong research skills; writing for several audiences and purposes; forms of writing common to needs of the education profession. A general education course (Written Communications II). PREREQ: ENG 101 and sophomore standing.

EDU 294 Special Topics: Education (3,0,3) This course will cover special topics and current issues in education. May be repeated for credit when topics vary.

EDU 300 Human Growth and Development (3,0,3) Life-span human development; physical, cognitive, social, and personal development especially as these relate to children in school and to the adults who influence them; individual study focusing on student development at specific levels of instruction. PREREQ: PSY 100.

EDU 301 Young Child in School $(3,0,3)$ Familiarization of prospective teachers with behavior and development of the young child in the classroom; development of activities, materials, methods, guidance, and parent relations; clinical and field experience. PREREQ: Junior standing.

EDU 302 Teaching of Reading (3,0,3) Nature of the reading process; scope and sequence of reading skills; plans for organizing classrooms for instruction. PREREQ: admission to the teacher education program. COREQ: EDS 322, and EDU 390, EDU 314, EDU 310.

EDU 303 Early Childhood Admission Practicum (2,0,2) Field experience for students planning to teach in Kentucky's high-risk birth-through-three programs (Kentucky's Early Intervention System) or in Kentucky's public school preschool programs, serving 3-to-5 year old children with and without disabilities; individual and group activities to assist students in making realistic career decisions. PREREQ: 48 semester hours completed; 2.5 overall GPA; acceptable score on standardized test.

EDU 304 Reading and Writing Across the Curriculum: Middle Grades (3,0,3) Nature of the reading and writing process in the middle grades across the curriculum; theory, instructional methods, and materials. COREQ: EDU 318, and EDU 394.

EDU 305 Introduction to Education (2,0,2) Examination of teaching as a profession and of schooling as it currently functions in the U.S.; inquiry into contemporary educational theory and practice to assist students in making realistic career decisions. PREREQ: EDU 104.

EDU 306 Teaching Elementary School Mathematics (3,0,3) Materials and methods for teaching problem solving, reasoning, communication, and connections of the concepts, skills, and relationships in elementary mathematics including number/computation, geometry/measurement, probability and statistics, and algebraic ideas. PREREQ: MAT 140 and MAT 141, each with minimum grade of $C$; satisfactory completion of professional semester I; admission to the teacher education program. COREQ: EDU 308, EDU 315, EDU 312 and EDU 392.

EDU 307 Admission Practicum for Elementary Grades (0,2,2) Field experience for students planning to teach in elementary schools; individual and group activities to assist students in making realistic career decisions. PREREQ: 48 semester hours completed; 2.5 overall GPA; acceptable score on standardized test.

EDU 308 Teaching Elementary School Science (3,0,3) Skills and content of science within the framework of scientific method; concepts, methods, and materials. PREREQ: one biology course with lab and one physical science course with lab or SCI 110 and SCI 111 (each with a minimum grade of $C$ ); satisfactory completion of Professional Semester I; admission to the teacher education program. COREQ: EDU 306, EDU 315, EDU 312, and EDU 392.

EDU 309 Admission Practicum for Middle Grades ( $0,4,2$ ) Field experience for students planning to teach in middle schools; individual and group activities to assist students in making realistic career decisions. PREREQ: 48 semester hours completed; 2.5 overall GPA; acceptable score on standardized test.

EDU 310 Teaching Language Arts in the Early Grades (3,0,3) Objectives, curricula, and instructional materials. PREREQ: ENG 101 and ENG 102 or equivalent; satisfactory completion of Professional Semester I: admission to the teacher education program. COREQ: EDU 302, EDU 314, and EDS 322.

EDU 311 Admission Practicum for Secondary Grades ( $0,4,2$ ) Field experience for students planning to teach in middle or secondary schools; individual and group activities to assist students in making realistic career decisions. PREREQ: 48 semester hours completed; 2.5 overall GPA; acceptable score on standardized test.

EDU 312 Teaching Social Studies in the Early Grades (3,0,3) Objectives, curricula, and instructional materials. PREREQ: 6 semester hours of history/geography; successful completion of Professional Semester I; admission to the teacher education program. COREQ: EDU 306, EDU 308, EDU 315, and EDU 392.

EDU 313 Computer Applications for Teachers ( $(3,0,3)$ Introduction to uses of technology (including computers, Internet, etc.) in education; utilization of technology as a tool for teachers and students; instructional applications of word processing, databases, and spreadsheets; issues in ethics for technology; preliminary work on digital portfolios. PREREQ: EDU 104 and INF 105 or CSC 270 or INF 260 or equivalent.

EDU 314 Classroom Management (3,0,3) Recent research and theory related to planning, organizing, and managing student learning and behavior in the classroom. PREREQ: admission to the teacher education program. COREQ: EDU 390, EDU 302, EDS 322.

EDU 315 Educational Assessment (3,0,3) Concepts and principles of testing needed to select, construct, and interpret assessment instruments used in schools. PREREQ: admission to the teacher education program.

EDU 316 Racism and Sexism in Educational Institutions (3,0,3) Role of educational institutions in perpetuating racism and sexism in the U.S.; how theories of prejudice, assimilation, feminism, and cultural reproduction explain patterns of social, cultural, political, psychological, and economic exclusion. A general education course (race/gender perspective).

EDU 317 Teaching Phonics $(3,0,3)$ The course content focuses on phonics as part of reading instruction. Students use children's literature to teach phonics in context. PREREQ: EDU 302. Requires admission to teacher education program.

EDU 318 Middle Grades and Secondary Classroom Climate Management $(1,0,1)$ Recent research and theory related to developing, maintaining, and managing an effective middle grades classroom climate. PREREQ: Admission to the teacher education program. COREQ: EDU 304 and EDU 394 (middle grade education students) and EDU 393, 324, EDS, 322 (secondary education students).

EDU 324 Fundamentals of Secondary Education $(2,0,2)$ Principles and strategies for effective secondary school teaching; curriculum planning, general teaching methods, and evaluation strategies; field based observation and teaching component. PREREQ: admission to the teacher education program. COREQ: EDU 393, EDU 318, EDS 322.

EDU 330 Teaching Science in the Secondary School $(2,2,3)$ Principles and methods for teaching concepts, skills, and processes in accordance with national and state standards with emphasis on inquiry including design, implementation, assessment and evaluation, and reflection-on-practice strategies in connection with technology, meeting all students’ needs and integration across the curriculum. PREREQ: $C$ or better in at least 24 credit hours which vary according to major.

EDU 331 Teaching Social Studies in the Secondary School (2,2,3) Principles and practices related to teaching social studies in accordance with KERA: basic social studies skills, professional content, and planning, implementing, and evaluating instruction; campus and field based experiences. PREREQ: admission to the teacher education program, or concurrently with admission semester.

EDU 333 Teaching Mathematics in the Secondary School (2,2,3) Principles and methods for teaching concepts, skills, and relationships in secondary mathematics in accordance with national and state standards including number/computation, geometry/measurement, probability and statistics, and algebraic ideas, and the appropriate use of manipulative and technology tools. PREREQ: admission to the teacher education program; MAT 120, MAT 220, and MAT 225 with a $C$ or better.

EDU 344 Fundamentals of Middle Grades Education (2,0,2)) Philosophy and learning theories forming the basis of the middle school program; curriculum and lesson planning, general teaching methods and motivation. PREREQ: admission to the teacher education program. COREQ: EDU 315 and EDU 391.

EDU 345 Teaching Language Arts in Middle Grades (3,0,3) Theory, content, and instructional strategies for teaching language arts in the middle-grades; field based observation and teaching component. PREREQ: 12 semester hours of language arts content courses with a grade of $C$ or better chosen from English, Speech, or Journalism and admission to the teacher education program.

EDU 346 Teaching Science in Middle Grades $(2,2,3)$ Theory, content, and instructional strategies; field-based observation and teaching component. PREREQ: 12 semester hours science content of C or better chosen from biological and physical sciences (AST, CHE, GLY, PHY) or SCI 110 and 111; one of which must be CHE 105.

EDU 347 Teaching Mathematics in Middle Grades $(3,0,3)$ Principles and methods for teaching concepts, skills, and relationships in middle grades mathematics in accordance with national and state standards including number/computation, geometry/measurement, probability and statistics, and algebraic ideas, and the appropriate use of manipulative and technology tools. PREREQ: at least 12 semester hours in mathematics including MAT 140 and MAT 141 each with a minimum grade of $C$, admission to Teacher Education Program, pursuance of middle-grades certification or extension in mathematics teaching area.

EDU 348 Teaching Social Studies in Middle Grades $(3,0,3)$ Theory, content, and instructional strategies; field-based observation and teaching component. PREREQ: 12 semester hours of history, geography, economics, political science each with a minimum grade of $C$; pursuance of middle grades certification in social studies teaching area; admission to the teacher education program.

EDU 390 Elementary Practicum I (0,2,2) Application of instructional theory to elementary classroom settings in reading, management, and assessment. PREREQ: admission to the teacher education program; successful completion of EDU 307. COREQ: EDU 302, EDU 314, EDS 322.

EDU 391 Middle Grades Practicum I $(0,4,2)$ Application of instructional theory to middle-grade classroom settings in reading, writing, management, inclusion, and assessment. PREREQ: successful completion of EDU 309; admission to the teacher education program. COREQ: EDU 315, and EDS 322, EDU 344.

EDU 392 Elementary Practicum II $(0,4,2)$ Practice in planning and implementing instructional strategies in early elementary classroom settings. PREREQ: successful completion of Elementary Practicum I. COREQ: EDU 306, EDU 308, EDU 315, and EDU 312.

EDU 393 Secondary Practicum I $(0,4,2)$ Practice in planning and implementing instructional strategies with secondary school students in area schools. PREREQ: admission to the teacher education program. COREQ: EDU 324.

EDU 394 Middle Grades Practicum II $(0,4,2)$ Practice in planning and implementing instructional strategies with middle grades students. PREREQ: successful completion of Middle-Grades Practicum I. COREQ: EDU 304, appropriate methods course.

EDU 395 IECE Practicum I $(0,4,2)$ Application of learning theory to early childhood settings. PREREQ: Admission to the teacher education program. Pass/Fail

EDU 396 Secondary Practicum II $(0,4,2)$ Application of instructional theory to secondary classroom settings in management, assessment, and planning and implementing effective instructional strategies. COREQ: EDU 315.

EDU 397 IECE Practicum II $(0,4,2)$ Practice in planning and implementing instructional strategies in early childhood settings. PREREQ: Successful completion of IECE Practicum I. Pass/Fail

EDU 398 IECE Practicum III $(0,4,2)$ Practice in assessing, screening, and applying appropriate plans in early childhood setting. PREREQ: Successful completion of IECE Practicum II. COREQ: EDU 566. Pass/Fail

EDU 491 Student Teaching with Early Childhood Endorsement (12 semester hours) Classroom experience through observation, planning and teaching supervised by an experienced teacher; eight-week assignment to an elementary classroom grades K-4; eight-week assignment to a special education program grades K-12. PREREQ: admission to early childhood education student teaching program.

EDU 492 Student Teaching in Elementary School with Special Education Endorsement (12 sem. hrs.) Classroom experiences through observing, planning, and teaching supervised by an experienced teacher; eight-week assignment to an elementary classroom grades K-5; eight week assignment to a special education program grades P-12.

EDU 493 Student Teaching in Middle Grades with Special Education Endorsement (12 sem. hrs.) Classroom experiences through observing, planning, and teaching under supervision of an experienced teacher: eight-week assignment to a middle grades classroom, grades 5-9; eight-week assignment to a special education program grades P-12. PREREQ: Admission to middle grades and special education student teaching program.

EDU 494 Student Teaching in Elementary School (12 sem. hrs.) Classroom experiences through observing, planning, and teaching under supervision of an experienced teacher; one-half semester assignment to each of two non-consecutive elementary classroom grades P-5. PREREQ: admission to the elementary education student teaching program.

EDU 495 Student Teaching in Middle Grades (12 sem. hrs.) Classroom experiences through observation, planning, and teaching under supervision of an experienced middle-grades teacher; grades 5-9. PREREQ: admission to the middlegrades student teaching program.

EDU 496 Student Teaching in Secondary School (12 sem. hrs.) Classroom experiences through observation, planning, and teaching under supervision of an experienced secondary teacher; full semester assignment to a secondary classroom, grades 8-12. PREREQ: admission to secondary student teaching.

EDU 497 Student Teaching in Secondary Education with Special Education (12 sem. hrs.) Classroom experiences through observing, planning, and teaching supervised by an experienced teacher; eight-week assignment in a secondary classroom grades 8-12; eight-week assignment to a special education program grades P-12.

EDU 498 Senior Seminar $(2,0,2)$ Integration of theoretical foundations of education with student teaching experiences; inquiry into teaching, life in schools, and role of schools in American society. COREQ: EDU 490, EDU 492, EDU 494, EDU 495, or EDU 496.

EDU 504 Context, Policy, and Organization of Middle/Secondary Education in Society $(4,0,4)$ Internal and external forces shaping the direction of education in America; school finance, school law, reform in education, multicultural education, historical antecedents, and philosophical undergirdings in education in America as related to contemporary educational theory and practice.

EDU 505 Behavior, Development, and Learning (3, 0, 3) Understanding of human development and behavior, the learning process, teaching models, and contemporary practices, procedures, and skills in the profession; obtaining information in these areas and applying it to the teaching process.

EDU 515 Instructional Design and Curriculum ( $3,0,3$ ) Basics in formation and experiences regarding general curriculum theory and design for regular, exceptional, and multicultural students; visits to designated schools for practical application of curriculum and design.

EDU 519 Effective Teaching and Learning (3, 0, 3) Basic information and experiences in teaching and learning for middle/secondary teachers; teaching methods/strategies; research in teaching; classroom management, motivation, assessment, evaluation, and measurement; grading policies/procedures, communications, and technology.

EDU 530 Reading in Junior and Senior High School (3,0,3) Principles and procedures related to reading in grades 8-12; basic reading skills, study skills, content fields, and reading programs. For teachers of all subjects. Required of students seeking certification to teach English.

EDU 540 Teaching the Underground Railroad (3,0,3) Research about the Underground Railroad, with an emphasis on local history, to assist teachers in classroom instruction. Taught in the summer every year.

EDU 546 Teaching Environmental Education (3,0,3) Principles and goals, curriculum models, teaching strategies, classroom and community resources, outdoor education, and research. PREREQ: admission to the teacher education program, or concurrently with the admission semester.

EDU 550 Current Trends in Early Childhood Education (2,0,2) Review of research in early childhood education; types of early childhood programs; parent education; working with disadvantaged children; significant issues in early childhood education. COREQ: EDU 551 (for graduate credit).

EDU 551 Classroom Activities in Early Childhood Education (0,2,1) Activities and instructional resources appropriate for preschool children. COREQ: EDU 550 (for graduate credit).

EDU 552 Infant and Toddler Education and Programming (3,0,3) Planning, implementation, and evaluation of developmentally and culturally appropriate environments for infants and toddlers. Emphasis is placed on the caregiverinfant relationship, developmental assessment, and adaptations for special needs. PREREQ: Admission to Teacher Education.

EDU 564 Collaboration In Early Childhood Education (3,0,3) Multidisciplinary and transdisciplinary teaming; communication skills necessary for collaboration; cultural differences, assistive technology, curriculum, and environmental designs with regard to collaborative early childhood programs. PREREQ: EDS 562 or equivalent.

EDU 566 Assessment In Early Childhood Education (3,0,3) Relation of best practices in traditional and dynamic assessment to child development; determination of eligibility for services; participation in a collaborative, supervised assessment of one child; writing an assessment report, IEP, and ISFP using assessment data. PREREQ: EDS 562 or equivalent.

EDU 568 Administration and Supervision In Early Childhood Education (3, 0, 3) Development of policies and procedures for administration and supervision in diverse early childhood programs; identification of funding sources; inquiry into ethical behavior and development of personal code of ethics and supervisory skills; program model design. PREREQ: EDS 562 or equivalent.

EDU 594 Professional Laboratory Experiences (12 sem. hrs.) Student participation in peer teaching experiences on campus and in field-based situations; materials, methods, innovative programs, and curricula; completion of a 12-week experience in the classroom; inquiry into teaching and the role of schools in American society.

EDU 595 Special Topical Seminars (3-6 sem. hrs.) Student participation in professional development seminars; trends, program dimensions, current issues in education and in the profession, and other culminating experiences.

EDU 598 Orientation (1-6 sem. hrs.) Student participation in orientation experiences in alternative teacher certification program; procedures, policies, standards, and resources; certification and program requirements; administration of CTBS and NTE batteries of tests to course participants; development of portfolios, KTIP procedures, and KERA requirements.

EDU 599 Selected Problems in Education (1-3 sem. hrs.) Individual or group indepth study.

## Emergency Medical Technology EMT

EMT 205 Emergency Medical Technology $(4,4,6)$ Emergency care and transportation of the sick and injured, cardiopulmonary resuscitation, including cardiac defibrillation and advanced airway management skills, bleeding control, sprain and fracture immobilization, emergency childbirth, medical and environmental emergencies, advanced medication modalities, and vehicular extrication. Prepares students to take the National Registry of Emergency Medical Technician Basic examination.

## Engineering Technology <br> EGT

EGT 110 Introduction to Engineering/Technology (3,0,3) Provides the computational skills needed to solve design problems. The course introduces concepts from intro to computer graphics and parametric design, basic electronics, basic mechanics, engineering calculations; technology computer applications; and spreadsheets for engineering calculations. PREREQ: MAT 099

EGT 116 Introduction to Industrial Materials and Processes (2,2,3) Fundamentals of materials, processing methods, tools, and equipment used to produce metallic and nonmetallic products; destructive and nondestructive testing.

EGT 161 DC Circuit Analysis $(2,2,3)$ Basic laws and theories, voltages, current, power, and resistance; resistive circuits in direct current circuits; analysis and applications. Mesh and node equations used in circuit analysis. PREREQ: MAH 099.

EGT 211 Quality Control $(3,0,3)$ Control and assurance of quality and reliability; management of quality function in the industrial setting.

EGT 212 Computer-aided Drafting and Design (CADD) (2,2,3) Fundamentals of computer aided drafting; production of technical drawings using CAD software; working drawings; standard machine elements; tolerance dimensioning.

EGT 260 Industrial Standards, Safety and Codes $(3,0,3)$ This course is designed to teach an overview of the standard or occupational health systems such as: six sigma, ISO 9001, ISO 1400, OSHA standards, ISO 13485, or Baldrige Criteria.

EGT 261 Engineering Materials $(2,2,3)$ Structures, properties, applications, and failure modes of materials, both metallic and non-metallic; heat treatment and processing effects on microstructure; introduction to chemical properties; principles and applications of destructive and non-destructive testing. PREREQ: CHE 120.

EGT 265 Manufacturing Processes and Operations $(2,2,3)$ Principles and applications of precision machining, numerical control processes, volume production, assembly methodology, and advanced concepts in manufacturing operations are discussed. PREREQ: EGT 116.

EGT 300 Statics and Strength of Materials $(3,0,3)$ Theory and application of the mechanics of rigid bodies in equilibrium; mechanical properties of materials; stress; strain; torsion; shear force and bending moments; beam deflection; combined loading. PREREQ: MAT 120 or 121; PHY 211.

EGT 301 Cooperative Education in Engineering Technology (3 sem. hrs.) This course provides students an opportunity to apply the knowledge and skills they are learning in the classroom to an employment position in business or industry. It allows students to test and refine career plans and interests; gain experience in their field of specialty before they begin searching for a permanent position; and build a network of professional contacts from which they may draw technical and employment information. PREREQ: consent of instructor.

EGT 310 Project Management and Problem Solving (3,0,3) Industrial project management practices: project implementation methods; resource selection; risks and failures; project management tools and techniques related to manufacturing projects. Problem solving models; quantitative and qualitative decision making strategies, including economic analysis; ethical, environmental, and social issues; impact of creative thinking, critical thinking, and problem solving on the design and quality of products and services. PREREQ: junior standing.

EGT 316 Materials Processing and Fabrication (2,2,3) Theory and application of surface treatment, casting, fabrication, separating, joining, shaping, and reducing using a variety of industrial materials. PREREQ: IET 116 or IET 120.

EGT 318 Introduction to Nanotechnology (3,0,3) Introduction to nanotechnology, fabrication and characterization of nano-scale structures, properties of nanostructures, nanostructured materials, wires and dots, nanobiology/nanomedicine, nanomgnetics, nanotubes, nanoelectronics, and nanoelectromechanical systems. PREREQ: CHE 120.

EGT 320 Robotic Systems and Material Handling $(2,2,3)$ Structure and operational characteristics; principles and theory of robot movement, robot teach/programming, program languages, robot arm, robot controller, work station. Material handling related to manufacturing, warehousing, type of equipment used and different concepts of material handling are covered. PREREQ: EGT 161.

EGT 321 Productivity Management, Scheduling \&Planning (3,0,3) The integration of systems required to improve work flow through the system, scheduling and coordination of projects. Systems of time management and work simplification; analysis of manufacturing and production problems including purchasing, work methods, inventory, material handling, production planning, and cost analysis. PREREQ: MAT 121 and EGT 211.

EGT 340 Applied Dynamics (3,0,3) Theories and applications of dynamic mechanics, including Newton's Laws, work, kinetics, impulse, and momentum. PREREQ: EGT 300; MAT 120 or MAT 121; PHY 211.

EGT 341 Integrated Resource Management $(3,0,3)$ This course utilizes the techniques of Enterprise Management. The course will focus on contrast and integration strategies, JIT techniques, integration, application and implementation. PREREQ: EGT 321.

EGT 343 A. C. Circuit Analysis (2,2,3) Application of basic electrical circuit analysis to alternating current (AC) systems; capacitors, inductors, transformers, and circuits using these components. Mesh and loop analysis, multiphase. PREREQ: EGT161 and MAT 121.

EGT 344 Analog Electronics $(2,2,3)$ Introduction to solid state, diodes, bipolar and field effect transistors, small signal amplifiers; power amplifiers, voltage regulators, and active filters. PREREQ: EGT 161.

EGT 345 Digital Electronics (2,2,3) Digital circuits; biters, counters, arithmetic circuits, and memories. PREREQ: EGT 161.

EGT 348 Electronic CAD $(2,2,3)$ Computer-aided design of electrical and electronic systems; schematic capture techniques; advanced circuit simulation. PREREQ: EGT 345.

EGT 361 Fluid Power $(2,2,3)$ Basic laws and concepts of fluid mechanics and their applications to fluid power circuits. PREREQ: MAT 120 or MAT 122; PHY 211.

EGT 365 Tool Design \& Computer Numerical Control (2,2,3) Design and selection of mechanical elements such as fasteners, cams, jigs, fixtures, and tools, utilizing Computer Numerical Control methods. This course also provides the knowledge needed to set up and program most C/NC machines equipped with EIA languages. The general application of information will be discussed, along with practical training on C/NC machines. PREREQ: EGT 212 and 265.

EGT 367 Microprocessors $(2,2,3)$ Architecture and instruction sets; programming, interfacing, and designing with microprocessors. PREREQ: EGT 345.

EGT 380 Machine Design $(2,2,3)$ Techniques involved in designing and selecting individual machine parts. An integrated approach to the design of machine elements. PREREQ: EGT 300, EGT 340.

EGT 386 Electro-Mechanical Instrumentation and Control (2,2,3) Introduction to the design of instrumentation and control systems. Study of thermal, mechanical, optical, and digital sensor operations and applications. Introduction to data acquisition systems. Laboratory experimentation involving the Programmable Logic Controls designing different logics to control devices and a selection of sensors to gather and utilize data from the equipment at hand. PREREQ: EGT 161.

EGT 399 Independent Study: Engineering Technology (1-3,0,1-3) For advanced students seeking to study selected problems. PREREQ:; consent of adviser.

EGT 404 Signals and Systems (3, 0, 3) Advanced circuit analysis techniques; time domain and frequency domain solutions; Laplace transforms; z-transforms; Fourier analysis; discrete-time systems. PREREQ: EGT 343 and MAT 221.

EGT 405 Metrology and Geometric Tolerancing (3,0,3) Metrology requirements and geometric tolerancing; calibration systems, gage studies, measurement elements, analysis and presentation of measurement data, quality implications. PREREQ: EGT 211 and EGT 212.

EGT 406 Industrial Electronics $(2,2,3)$ Theory, analysis, and application of open and closed loop industrial control systems consisting of both analog and digital components; sensing circuits; transducers; electric motors; optielectronics. Specification, selection, and design of industrial electronics systems and programmable logic controllers. PREREQ: EGT 344.

EGT 411 Quality Assurance and Auditing (3,0,3) Organizing and implementing the quality audit; types of audits; ISO 9000 quality standards; audit planning, execution, testing, reliability, and system appraisal. PREREQ: EGT 211.

EGT 412 Advanced CADD $(2,2,3)$ CADD 3D features; customized and professional CADD techniques; advanced features. PREREQ: EGT 212.

EGT 417 Senior Research \& Design in Engineering Technology (1,4,3) Preparation and proposal for the capstone project design in an area of student's primary program major. After the preparation and proposal is prepared, with permission from their advisors, students design, build, document, demonstrate, and present the results. Must be taken within three semesters of graduation, may be repeated up to 9 semester hours. PREREQ: senior standing.

EGT 423 Planning and Design of Industrial Facilities $(1,4,3)$ Planning, estimating, designing, and modeling industrial facilities; management, personnel, production, aesthetics, and the environment. PREREQ: EGT 212

EGT 448 Network Hardware $(2,2,3)$ Concepts and examples of network hardware used in data communications, including introduction to advanced concepts. Transmission media, data links, multiplexing, carrier systems, digital transmission systems, routers, interfaces, data transmission. PREREQ: EGT 345.

EGT 450 Thermodynamics and Heat Transfer $(2,2,3)$ Fundamentals of thermodynamics, first and second laws of thermodynamics, properties of liquids and gases; air-conditioning and refrigeration systems; power cycles; modes of heat transfer (conduction, convection, and radiation) and their applications in technology; computer simulations of thermodynamics and heat transfer processes. PREREQ: MAT 120 or MAT 122; PHY 211.

EGT 462 Finite Element Modeling (2,2,3) Fundamentals of Finite Element Modeling, creation of geometry, material selection and problem solving. The course focuses on FEA modeling techniques utilizing CAD/CAE software. PREREQ: EGT 412, EGT 340.

EGT 465 Automated Manufacturing Systems (2,2,3) Integrated manufacturing automation including CIM/FMS, system controls, fixed systems, robotics, and economics of automation. PREREQ: EGT 320 and EGT 365.

EGT 467 Advanced Microprocessors (2,2,3) Advanced architectures, multitasking, virtual memory, networking, assembly language programming, and advanced interfacing techniques. PREREQ: EGT 367.

## Electronic Media Broadcasting <br> EMB

EMB 100 Media Literacy $(3,0,3)$ Fundamental concepts of mediated communication; analysis of roles, functions, and influence of media on individuals and society. Same as JOU 100. A general education course (social sciences).

EMB 105 Race, Gender, and the Mass Media (3,0,3) Mass media's influence on perceptions of race and gender in the U.S.; historical development of gender and ethnic stereotypes; mass media's relation to politics and economics; discriminatory practice in the media industry; effect of communication education; alternative media. A general education course (race/gender).

EMB 110 Introduction to Mass Media (3,0,3) Introduction to program and profession; organization, operations, programming, audience measurement, and impact of electronic media; legal, economic and social controls of radio, TV, cable, new media, and corporate media within a historical framework. Same as JOU 110.

EMB 140 Introduction to Media Aesthetics $(2,4,3)$ Introduction to the aesthetics and basic technologies of creating audio, video and interactive media. A course grounded in theoretical concepts with practical application.

EMB 210 Introduction to Video: Single Camera Production (2,4,3) Introduction to small format, video program design and development; theory and practice of single camera videotaping and editing; modes of visual storytelling. PREREQ: Completion of EMB 140 with aC or better.

EMB 215 Introduction to Audio Production (3,3,3) Theory and practice in planning and producing a selective group of audio program elements typical of the present industry; coordinating the control console, turntables, tape cartridge machines, and tape recorders; audio recording, mixing, and editing. PREREQ: Completion of EMB 140 with a $C$ or better.

EMB 230 Broadcast Announcing (3,0,3) Theory and practice in delivery techniques for radio and television, including work on voice, diction, and pronunciation; development of a cultural framework essential for versatility in announcing; interpretation of the most commonly used scripts in broadcasting; the studio interview. PREREQ: Completion of EMB 140 with a $C$ or better.

EMB 260 Writing for the Media (3,0,3) Non-journalistic writing techniques and styles used in television and radio including narrative and documentary modes of story telling. PREREQ: 20 or higher on ACT English section.

EMB 265 Broadcast News Writing (3,0,3) Principles and practice of writing and editing news for the electronic media; development of an effective broadcasting style, conciseness, and accuracy for hard news and features; basic reporting and interviewing techniques, electronic news gathering, rewriting, editing, and compiling. PREREQ: 20 or higher on ACT English section.

EMB 305 Multicamera Video Production $(2,4,3)$ Principles and techniques of directing both scripted and non-scripted multi-camera studio-based productions; examination of problems of the director and aesthetics of television; discussion, selected readings, and productions. PREREQ: Completion of EMB 210 and EMB 215 with a $C$ or better.

EMB 307 Broadcast Programming ( $3,0,3$ ) Strategies of program selection, scheduling, and evaluation; audience ratings, research, and analysis. PREREQ: Completion of EMB 110 with a $C$ or better.

EMB 310 Advanced News Production (2,4,3) Advanced electronic news gathering and electronic field production techniques with emphasis on broadcast quality scripting, taping, and editing. PREREQ: Completion of EMB 210 with a $C$ or better.

EMB 311 History of Broadcasting (3,0,3) Development of electronic media, principally in the U.S., from their origin as 19th century instruments of science to the present; broadcasting as a vehicle of expression and as an industry. PREREQ: Completion of EMB 110 with a $C$ or better.

EMB 313 Media Sales, Advertising and Promotion (3,0,3) An examination of the principles and problems associated with valuing, selling, and promoting media. Includes campaign development, the valuation of air time, working
inside and outside a network environment and the use of alternative media outlets.

EMB 315 Media Performance $(2,4,3)$ Theory and practice in television performance techniques; interpretation and use of scripts in television; various nonscripted types of performance; work on the commercial, the public service announcement, the newscast, and the interview. PREREQ: Completion of EMB 230 with a $C$ or better.

EMB 320 Advanced Sound Production $(2,4,3)$ Practicum in advanced sound production; experience in production of various radio program formats including dramatic documentary, cultural affairs, and public affairs programming; advanced skills in commercial production, 4-track recording, and mix-down technique. PREREQ: Completion of EMB 215 with a $C$ or better.

EMB 325 Advanced Media Performance $(2,4,3)$ Intensive practice in the form of television performance currently employed in both commercial and noncommercial television; the dramatic and comedy sequence, announcing, show-hosting, and news reporting. PREREQ: Completion of EMB 315 with a $C$ or better.

EMB 360 Interviewing $(3,0,3)$ Theory and principles related to a variety of interviewing settings: employment, information, and advising; role of interviewer and interviewee; use of role playing; outside class exercises such as real interviews and written reports. Same as JOU 360 and CMST 360.

EMB 361 Advanced Broadcast Newswriting $(3,0,3)$ Intensive practice of writing and editing news for the electronic (traditionally broadcast) media; advanced reporting and interviewing techniques; refinement of broadcast news writing style including conciseness, accuracy, editing and developing voiceovers and packages, and writing for particular media. PREREQ: Completion of EMB 265 with a $C$ or better.

EMB 370 International Media Systems (3,0,3) Regional and global telecommunications and media systems in relation to social, cultural, economic, and political factors: comparative analysis of the major media systems of the world. PREREQ: Completion of EMB 110 with a $C$ or better.

EMB 380 Documentary Theory and History ( $3,0,3$ ) Development of film and television documentary mode; theoretical paradigms used to critically study documentaries. PREREQ: Completion of EMB 110 with a $C$ or better.

EMB 394 Intermediate Topics: Radio-Television (3,0,3 or 2,4,3) Focused study of a specific and significant topic concerning radio-television. Topics vary from semester to semester. May be repeated once for credit. PREREQ: varies according to topic.

EMB 396 Internship: Radio-Television ( $0,12,3$ or $0,24,6$ ) Selected placement of qualified students in off-campus telecommunications (television, radio, or audio) facilities. Work experiences include programming, writing, production, sales, promotion, and management and may involve broadcast or non-broadcast facilities. PREREQ: written consent of the supervising faculty member; junior or senior standing; GPA of at least 2.75.

EMB 397 Projects $(0,12,3)$ Practical application of various broadcasting techniques. May be repeated for a maximum of 6 semester hours. PREREQ: Written consent of instructor.

EMB 400 Media Criticism $(3,0,3)$ Seminar designed to develop an increased sensitivity to the effectiveness of broadcasting in fulfilling its societal role both as an art form and as a vehicle for the dissemination of information to society. Criteria of criticism are developed largely in response to broadcast programming. PREREQ: Completion of EMB 110 with a $C$ or better; junior or senior standing.

EMB 421 Advanced Narrative Production $(2,4,3)$ Theory and practice of digital cinema production. PREREQ: Completion of EMB 210 with a $C$ or better.

EMB 422 Advanced Digital Video Editing $(3,3,3)$ Concepts and techniques of digital, non-linear video editing and composing. PREREQ: Completion of EMB 210 with a $C$ or better.

EMB 430 Communication Theories $(3,0,3)$ Theories of interpersonal, group, public, and mass communication; historical developments, paradigms, and
research that shape communication theory construction. Same as JOU 430 and CMST 430. PREREQ: Completion of EMB 110 with a $C$ or better.

EMB 450 Advanced Writing for the Media $(3,0,3)$ Practice in creative writing for broadcast, expressed in television and radio documentaries, instructional programs, and plays; writing and development of broadcast program units utilizing other literary forms (such as the short story and poem). PREREQ: Completion of EMB 260 with a $C$ or better.

EMB 499 Independent Study (1-3 semester hours) Individually supervised work involving reading, research and/or production in a specified area of interest. Topic selected before registration in conference with instructor. May be repeated for a maximum of 6 semester hours. PREREQ: Junior or senior standing; minimum GPA of 2.50; written consent of instructor.

## English <br> ENG

ENG 090 Writing Workshop $(3,0,3)$ Practice in a variety of writing forms; selecting topics, working through the writing process, and conferring with instructor and peers. One additional hour per week of tutoring in the Writing Center required. Not applicable toward graduation. For students needing additional preparation for ENG 101. COREQ: LAP 090.

ENG 101 College Writing $(3,0,3)$ Study and practice of essay writing; reading, writing, and analyzing expository prose. A general education course (written communications I). PREREQ: English and Reading ACT/SAT/COMPASS scores as announced in current Schedule of Classes; OR placement test; OR, depending upon placement, ENG 090 and/or LAP 091.

ENG 110 English for International Students I $(3,0,3)$ Basic techniques of composition for foreign students. Preparation for ENG 101.

ENG 111 English for International Students II $(3,0,3)$ May be taken as a continuation of ENG 110 or as a beginning course for more advanced students.

ENG 112 Audiolingual English I (3,0,3) Development of speaking ability and listening comprehension for foreign students; review of basic English sentence structure.

ENG 113 Audiolingual English II $(3,0,3)$ May be taken as a continuation of ENG 112 or as a beginning course for more advanced students.

ENG 151H Honors Freshman Composition (3,0,3) An accelerated program of writing practice. Students study works appropriate to the humanities in a seminar setting. Enrollment limited to 15 per section. A general education course (written communications II). PREREQ: 26 or above on the current ACT or a comparable score on the enhanced ACT, or equivalent; evidence of writing proficiency; approval of department.

ENG 200 Introduction to Literature (3,0,3) Critical rather than historical approach; readings in fiction, poetry, and drama. A general education course (literature or humanities). PREREQ: ENG 101 or ENG 151 or equivalent.

ENG 201 Ideas in Literature (3,0,3) Works representing a variety of literary forms and reflecting a common theme or motif. Topics vary. A general education course (literature or humanities). PREREQ: ENG 101 or ENG 151 or equivalent and sophomore standing.

ENG 202 Survey of British Literature I (3,0,3) Anglo-Saxon period to the 18th century; emphasis on more important writers, with attention to their cultural background. Required for the major in English. A general education course (literature or humanities). PREREQ: ENG 101 or 151 or equivalent.

ENG 203 Survey of British Literature II $(3,0,3)$ Romantic period to the present; emphasis on more important writers with attention to their cultural background. Required for the major in English. A general education course (literature or humanities). PREREQ: ENG 101 or 151 or equivalent.

ENG 206 Western World Literature I (3,0,3) Important works of continental European literature, in translation, from its origins to the Renaissance. A general education course (literature or humanities). PREREQ: ENG 101 or 151 or equivalent.

ENG 207 Western World Literature II (3,0,3) Important works of continental European literature, in translation, from the Renaissance to the present; ideas, techniques, and influences. A general education course (literature or humanities). PREREQ: ENG 101 or 151 or equivalent.

ENG 208 Survey of American Literature I $(3,0,3)$ Beginnings to the Civil War. A general education course (literature or humanities). PREREQ: ENG 101 or 151 or equivalent.

ENG 209 Survey of American Literature II $(3,0,3)$ Civil War to the present. A general education course (literature or humanities). PREREQ: ENG 101 or 151 or equivalent.

ENG 211 Survey of Women's Literature I (3,0,3) Writing from many genres by women of many cultures from antiquity through the 19th century. A general education course (literature or humanities). PREREQ: ENG 101 or ENG 151 or equivalent.

ENG 212 Survey of Women's Literature II (3,0,3) Writing of many genres by women of many cultures from the early 20th century to the present. A general education course (literature or humanities). PREREQ: ENG 101 or ENG 151 or equivalent.

ENG 215 Greek and Roman Mythology $(3,0,3)$ Survey of classical pantheon of gods and heroes and their development from early Greek civilization to imperial Rome; influence of classical mythology on later national literatures. PREREQ: ENG 101 or ENG 151 or equivalent.

ENG 216 Studies in Non-western Literature (3,0,3) Mythology, poetry, drama, prose, and fiction selected from one or several non-western literatures (e.g., Chinese, Arabic, African, Indian, Japanese). Subject matter of course may vary. PREREQ: 3 semester hours of literature. A general education course (literature or non-western).

ENG 217 African American Literature to 1940 (3,0,3) Works by African American authors 1746-1940. Cultural, historical, and social issues with focus on development of field as a distinct tradition. A general education course (literature or race/gender). PREREQ: ENG 101, 151 or equivalent.

ENG 218 African American Literature 1940-present (3,0,3) Works by African American authors 1940-present. Cultural, historical, and social issues with focus on development of field as a distinct tradition. A general education course (literature, humanities, or race/gender). PREREQ: ENG 101, 151 or equivalent.

ENG 231 Introduction to Creative Writing $(3,0,3)$ Creative writing, emphasis on composing fiction and/or poetry. PREREQ: ENG 101 or 151 or equivalent.

ENG 265H Honors Literature and the Human Experience (3,0,3) Poetry, drama, and fiction as portrayals of the range and complexity of human experience from the perspectives of writers from many cultures and many ages. Designed for students in the English honors program. A general education course (literature or humanities). PREREQ: ENG 151.

ENG 266 Folklore and Literature (3,0,3) Introduction to folklore genres (e.g., myth, fairy tale, proverb, ballad) and their use or redaction in written literature. A general education course (literature or humanities). PREREQ: ENG 101 or ENG 151 or equivalent and sophomore standing.

ENG 291 Advanced College Writing (3,0,3) Practice in a variety of expository forms. A general education course (Written Communications II). May not be used to meet requirements for the major in English. PREREQ: ENG 101 and sophomore standing.

ENG 300 American Women Poets $(3,0,3)$ Lives and works of selected poets, including African-Americans. A general education course (literature or humanities). PREREQ: 3 semester hours of literature.

ENG 301 American Novel $(3,0,3)$ Novels from various periods; techniques, ideas, and social implications. A general education course (literature or humanities). PREREQ: 3 semester hours of literature.

ENG 302 Literature and Film $(3,0,3)$ The art of film and its relationship to literature; films shown are cinematic versions of literary texts or have special rela-
tionships to literature. A general education course (literature or humanities). PREREQ: 3 semester hours of literature.

ENG 304 Intro to Post-Colonial Literature (3,0,3) Fundamental concepts of Post-Colonial literature. A variety of literary forms and works by major postcolonial and diasporic writers. Issues of literary representation and canon formation during the later half of the twentieth century. Fulfills diversity requirement for the English major. PREREQ: 3 semester hours of literature.

ENG 305 American Women Writers (3,0,3) Works representing a variety of literary forms by American women writers, from the 17th through the 20th century. A general education course (humanities or literature). PREREQ: 3 semester hours of literature.

ENG 306 Multicultural American Literature (3,0,3) Study of writers in two or more ethnic American literatures; e.g., American Indian, African American, Asian American, and Latino. A general education course (literature or race/ gender perspective. Fulfills diversity requirement for the English major. PREREQ: ENG 101, 151, or equivalent.

ENG 308 Shakespeare I $(3,0,3)$ The early period, the English histories, the comedies, and Hamlet. A general education course (humanities or literature). PREREQ: 3 semester hours of literature.

ENG 309 Shakespeare II (3,0,3) Plays not studied in ENG 308, including the romances, satires, and tragedies. A general education course (humanities or literature). PREREQ: 3 semester hours of literature.

ENG 311 Tragedy (3,0,3) The tragic vision of life from its beginnings in Athens to the modern period; theories of tragedy; plays and novels that embody the tragic spirit. A general education course (literature or humanities). PREREQ: 3 semester hours of literature.

ENG 312 Comedy $(3,0,3)$ Comic genres and techniques from ancient Greek comedy to recent films, novels, and plays; important theories of comedy. A general education course (literature or humanities). PREREQ: 3 semester hours of literature.

ENG 313 Middle Eastern Literature (3,0,3) A survey of Middle Eastern literature in English and/or in translation from Arabic, Persian, Turkish, and/or Hebrew traditions. PREREQ: 3 semester hours of literature.

ENG 314 Modern European Literature in Translation (3,0,3) Art, ideas, and traditions in major literary works of the 19th and 20th century continental authors. A general education course (literature or humanities). PREREQ: 3 semester hours of literature.

ENG 315 The Bible as Literature (3,0,3) Nonsectarian presentation of biblical history, ideas and literary forms and techniques. A general education course (humanities or literature). PREREQ: 3 semester hours of literature.

ENG 318 The Short Story $(3,0,3)$ An historical, critical, and evaluative study of the short story as a distinct literary genre. A general education course (literature or humanities). PREREQ: 3 semester hours of literature.

ENG 320 Satire $(3,0,3)$ Techniques of the satirist and the development of satire, especially in prose. A general education course (literature or humanities). PREREQ: 3 semester hours of literature.

ENG 322 Literature and Sexuality (3,0,3) Literature and theory by writers who identify as lesbian, gay, bisexual, and/or trans-gendered or who represent these identities in literature. A general education course (literature or race/gender perspective). Fulfills diversity requirement for the English major. PREREQ: ENG 101, 151 or equivalent.

ENG 331 Persuasive Writing $(3,0,3)$ Theory and practice of contemporary and classical persuasion; analysis of professional writing and student themes. Counts towards literature and writing option for the English major. PREREQ: ENG 291 or equivalent.

ENG 332 Fiction Writing ( $3,0,3$ ) Techniques of short story, novelette, novel, and drama; in-class analysis of student work and the subsequent revision, reevalua-
tion, and marketing of student writing. Counts towards literature and writing option for the English major. PREREQ: ENG 231.

ENG 334 Poetry Writing $(3,0,3)$ Practice in techniques of writing poetry; in-class analysis of student poems and the subsequent revision, reevaluation, and marketing of student work. Counts towards literature and writing option for the English major. PREREQ: ENG 231.

ENG 340 Business Writing $(3,0,3)$ Practical experience in business writing: proposals, resumes, letters, reports, and memoranda. For students majoring in business as well as other students who anticipate professional careers involving on-the-job writing tasks. Counts towards literature and writing option for the English major. PREREQ: ENG 291 or equivalent.

ENG 345 Legal Writing $(3,0,3)$ The writing of legal arguments; logical reasoning, clarity, conciseness, grammar, punctuation. For those considering or pursuing careers in law or other professions involving the writing of contracts and legal documents. Counts towards literature and writing option for the English major. PREREQ: ENG 291 or equivalent.

ENG 347 Technical Writing $(3,0,3)$ Principles and techniques of technical writing, including proposals, lab reports, job applications, graphics, and feasibility studies. Recommended for students in sciences, public administration, social services, industry, and health and computer fields. Prepares students for cooperative writing internships in industries or agencies. Counts towards literature and writing option for the English major. PREREQ: ENG 291 or equivalent.

ENG 348 Professional Editing in the Workplace $(3,0,3)$ Theoretical and practical grounding in professional workplace editing as an evolving profession. Design, edit, and manage complex workplace documents using both manual means and industry-standard software. Counts towards literature and writing option for the English major. PREREQ: ENG 291 or equivalent with $C$ or better.

ENG 349 Web Writing for the Professions $(3,0,3)$ Theoretical and practical grounding in analyzing, planning, and implementing web-based publications, including integration of textual/visual materials and use of industry standard Internet publishing tools. Students will learn to assess client needs and test site usability by creating several web pages, including a multi-layer website for a real-world client. Counts towards literature and writing option for the English major. PREREQ: ENG 291 or equivalent.

ENG 350 Literary Criticism $(3,0,3)$ Introduction to the practice of literary criticism. Various critical approaches to be introduced and applied to works of early and late periods of literature. PREREQ: 6 semester hours of literature.

ENG 353 Contemporary American Novel $(3,0,3)$ Themes and techniques of particular importance in contemporary American novels. PREREQ: 6 semester hours of literature.

ENG 355 Women's Autobiographical Writing (3,0,3) Reading, writing about, and editing for publication women's personal writing: journals, autobiographies, and autobiographical fiction, including that done by minorities and Third World women. PREREQ: 3 semester hours of literature.

ENG 357 Biographical Writing $(3,0,3)$ Reading, writing about, and writing biography; theory, practice, and analysis of biography as literary genre. Counts towards literature and writing option for the English major. PREREQ: 6 semester hours of literature.

ENG 358 Writing in Creative Genres $(3,0,3)$ Principles and techniques of creative writing in a specialized genre such as children's creative non-fiction, fantasy, dramatic, etc.; in-class analysis of student work with subsequent revisions. May be repeated for credit when genre changes. Counts towards literature and writing option for the English major. PREREQ: ENG 231.

ENG 359 Writing in Workplace Genres (3,0,3) Principles and techniques of workplace writing in a specialized genre, such as business report writing, manual writing, grant writing, proposal writing, etc. In-class analysis of student work with subsequent revisions. Repeatable for 3 credit hours when genre changes. Counts towards literature and writing option for the English major. PREREQ: ENG 291 or equivalent.

ENG 362 Studies in Dramatic Literature (3,0,3) Study of various periods and kinds of dramatic literature. May be repeated when topics vary. PREREQ: 6 semester hours of literature.

ENG 365 American Folklore (3,0,3) Folk narrative, poetry, songs, customs, beliefs, etc., of regional, ethnic, and occupational groups across the U.S.; methods of collecting, classifying, and studying folklore. PREREQ: ENG101 or ENG 151 or equivalent and sophomore standing.

ENG 366 Studies in Literary Genres $(3,0,3)$ Study of one or more genres from various periods and cultures; techniques, structures, sub-genres, and themes. May be repeated as topics vary. PREREQ: 6 semester hours of literature.

ENG 371 Traditional Grammar $(3,0,3)$ This course provides an understanding of sentence parts and patterns, punctuation, usage, and sensitivity to style. Such instruction in traditional grammar can help students (a) write correctly and effectively, (b) apply logical thinking, (c) become wise analysts of texts, and (d) teach others conventional uses of language. Counts towards literature and writing option for the English major. PREREQ: ENG 101 or ENG 151 with a grade of $C$ or better.

ENG 380 Studies in Literature and Other Arts (3,0,3) Literary works compared with musical compositions, with paintings, or with both music and painting. May be repeated for credit when topics vary. PREREQ: 6 semester hours of literature.

ENG 381 Introduction to Linguistics (3,0,3) Methods of analyzing language. Satisfies the linguistics requirement for English majors seeking secondary certification. PREREQ: 6 semester hours of English; junior standing.

ENG 382 History of the English Language (3,0,3) Development of English from Indo-European to the present; internal and external influences resulting in change. Satisfies the linguistics requirement for those seeking secondary certification in English. PREREQ: 6 semester hours of English; junior standing.

ENG 384 Modern Poetry $(3,0,3)$ Prosodic theory; practice in interpretation of poetic texts. PREREQ: 6 semester hours of literature.

ENG 385 Teaching of English I $(3,1,3)$ Combination of theoretical and practical problems in the teaching of writing and grammar. Required of all students majoring in English who seek secondary certification. PREREQ: admission to teacher education program or valid secondary teaching certificate.

ENG 386 Children's Literature $(3,0,3)$ For students seeking provisional certification in elementary education. PREREQ: 3 semester hours of literature.

ENG 387 Teaching of English II $(3,0,3)$ Combination of theoretical and practical problems in the teaching of literature. Required of those seeking secondary certification in English. PREREQ: admission to teacher educational program or valid secondary teaching certificate.

ENG 396 Internship: Editing I $(3,0,3)$ Introduction to evaluation of manuscripts, proofreading, copy editing, and other responsibilities of journal editing under supervision of faculty sponsor. May not be used to meet requirements for the major in English. PREREQ: 291 or equivalent.

ENG 401 Chaucer $(3,0,3)$ Study of Goeffrey Chaucer's poetry, including the Canterbury Tales and possibly Troilus and Criseyde, the shorter poems, and/or postmedieval transmissions of Chaucer's works. Pre-1800 Brit LIt credit. PREREQ: 6 hours semester hours of literature.

ENG 402 Middle English Literature (3,0,3) Advanced survey of Middle British literature of various genres. Pre-1800 Brit Lit credit. PREREQ: 6 semester hours of literature.

ENG 403 Old English (3,0,3) Language and literature of Anglo Saxon England. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 404 Arthurian Literature $(3,0,3)$ Advanced study of medieval origins of the legend of King Arthur. May also consider post-medieval transmission of the Arthurian tradition in literary texts, film, etc. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 411 Elizabethan Literature (3,0,3) The period of Marlowe, Sidney, Spenser, and Shakespeare. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 412 English Renaissance Drama (3,0,3) Dramatic works written in Elizabethan and Jacobean England. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 414 Non Shakespearean Elizabethan Drama $(3,0,3)$ Shakespeare's predecessors and contemporaries. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 416 Studies in Renaissance Literature $(3,0,3)$ Works reflecting a common topic, genre, or literary movement. May be repeated for credit when content varies. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 420 Pre 1800 Exploration/Travel Literature (3,0,3) Comparative study of the rhetoric, contexts, and uses of pre-1800 exploration and travel narratives, particularly those depicting cross-cultural encounters and non-western landscapes. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 421 Restoration and Eighteenth Century Literature (3,0,3) Significant works of literature written between 1660 and 1798; satire, comedy of manners, novel, and poetry in the context of social backgrounds. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 422 Studies in Eighteenth Century Literature (3,0,3) Ideas and themes in several works, or in a single major writer, or in a circle of writers; content varies. May be repeated for credit when content varies. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 425 Eighteenth Century British Novel $(3,0,3)$ Critical approaches to selected novels by British authors ranging from Daniel Defoe and Samuel Richardson to Frances Burney and Jane Austen; novelistic modes such as picaresque, epistolary, gothic, and novel of manners. Pre-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 431 Screenwriting (3,0,3) Analysis of professional and student screenplays; completion of a script for feature length film, episode of a contemporary TV show, adaptation of a novel or short story, docudrama, or documentary film. Counts towards literature and writing option for the English major. PREREQ: ENG 231 or equivalent.

ENG 432 Novel Writing I $(3,0,3)$ Explores the particular requirements of the novel form. Examines the creation of effective characterization, setting, themes and plots. Demands substantial reading, writing, and outside research. Counts towards literature and writing option for the English major. PREREEQ: ENG 231.

ENG 433 Novel Writing II $(3,0,3)$ Continuation of Novel Writing I focusing on issues specific to writing the middle and ending of a novel. PREREQ: ENG 432.

ENG 442 Studies in British Literature Since 1775 (3,0,3) Works reflecting a common theme, genre, or literary movement. May be repeated for credit when topics vary. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 446 British Novel $(3,0,3)$ Selected novels from various periods; narrative technique, historical context, and social implications. A general education course (literature or humanities). PREREQ: 6 semester hours of literature.

ENG 451 Romantic Literature (3,0,3) Genius, originality, irony, Christianity, nature, symbol, and myth in major romantic poets. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 452 Victorian Literature $(3,0,3)$ Poetry, fiction, prose, and myth in the age of Tennyson, Hardy, Carlyle, and Eliot. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 453 Nineteenth/Twentieth Century Ideas (3,0,3) Revelation in Romantic poetry to disintegration in mid-century British fiction. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature; PHI 150 recommended.

ENG 454 Nineteenth Century British Novel $(3,0,3)$ Aesthetic and analytical approach to major British novels of the 19th century. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 456 The Gothic in Literature and the Arts $(3,0,3)$ Study of the Gothic mode in literature an other arts, such as architecture, film, and the visual arts. PREREQ: 6 semesters of literature.

ENG 461 Nineteenth Century American Literature (3,0,3) Major authors of 19th century American fiction, essays, and poetry. May be repeated once for credit when topics vary. Upper-division and Pre-1900 American Literature credit. PREREQ: 6 semester hours of literature.

ENG 462 Modern American Literature (3,0,3) Trends in form and content in 20th century American writing. May be repeated once for credit when topics vary. Upper-division American Literature credit. PREREQ: 6 semester hours of literature.

ENG 463 Studies in Regional American Literature (3,0,3) Various regional literatures, e.g., those of Kentucky and southern Appalachia. May be repeated for credit when topics vary. Upper-division American Literature credit. PREREQ: 6 semester hours of literature or consent of instructor.

ENG 464 Studies in American Literature (3.0.3) Works reflecting a common theme, genre, era, or literary movement. May be repeated for credit when topics vary. Upper-division American Literature credit. PREREQ: 6 semester hours of literature.

ENG 465 Southern Women Writers $(3,0,3)$ Selected fiction by southern women writers, especially focusing on issues of race, class, gender, and regional identity. Upper-division American literature credit. PREREQ: 6 semester hours of literature.

ENG 466 Focus on United States Civilization $(3,0,3)$ Topics for interdisciplinary study, e.g., the 1890s, the 1920s the1930s, British views of America, political movements, ideological trends, and 19th century ideas. Upper-division American Literature credit. PREREQ: 6 semester hours of literature.

ENG 467 Topics: African American Literature $(3,0,3)$ Various periods and kinds of African American literature; issues of ethnicity/race and sex/gender; cultural, political, economic, and social issues. Fulfills diversity and upper-division American Literature requirement for English major. May be repeated when topics vary. PREREQ: 3 semester hours of literature.

ENG 470 Twentieth Century British Novel $(3,0,3)$ Aesthetic and analytical approach to major British novels of the 20th century. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 471 Thomas Hardy and D. H. Lawrence (3,0,3) Study of the fiction and poetry as critical profiles of the Victorian past and as reflections of our own ways of thinking and seeing. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 472 Studies in British Modernism (3,0,3) Literature by such major authors as Woolf, Eliot, Yeates, and Joyce and their circles, and selected movements defining British Modernism, 1910 to 1950; disillusionment with Victorian values; impact of World War I; innovation in aesthetic form. May be repeated for credit when topics vary. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 473 Studies in Contemporary British Literature (3,0,3) Post-1950 British Literature by selected authors, reflecting aesthetic, social, political, intellectual, and economic trends. May be repeated once for credit when topics vary. Post1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 474 Studies in Postmodern Literature $(3,0,3)$ Twentieth-century literature written primarily after WWII and representing a conscious attempt to move beyond the modes and thematics of the High Modernists. May be repeated once for credit when topics vary. Post-1800 British Literature credit. PREREQ: 6 semesters of literature.

ENG 475 Post-Colonial Literature and Theory (3,0,3) Development of major themes, techniques, and theories of post-colonial writing, including issues of
appropriation, literary hybridity, cultural hegemony, and Otherness. Post-1800 British Literature credit. Fulfills diversity requirement for the English major. PREREQ: 6 semester hours of literature.

ENG 477 Irish Literary Renaissance $(3,0,3)$ Works associated with the Irish Literary Renaissance (1880-1939), a movement dedicated to creating a literature based on Irish history, legend, and folklore. Writers may include Yeates, Joyce, Synge, Gregory, O’Casey. Post-1800 British Literature credit. PREREQ: 6 semester hours of literature.

ENG 485 Studies in Literary Theory (3, 0, 3) A particular theoretical approach, issue, or problem. May be repeated for credit when content varies. PREREQ: 3 semester hours of literature.

ENG 494 Senior Seminar $(3,0,3)$ Intensive study of a specific topic or problem. PREREQ: 6 semester hours of literature.

ENG 496 Internship: Editing II $(3,0,3)$ Editorial duties associated with production of department and university publications under supervision of faculty sponsor. May not be used to meet requirements for the major in English. PREREQ: ENG 396 or equivalent.

ENG 496 Internship: Writing Pedagogy $(3,0,3)$ Intended for students majoring in English who are interested in strategies for teaching writing on the university level; peer tutoring of student writing under supervision of a faculty sponsor. May not be used to meet requirements for the major in English. PREREQ: junior standing and consent of instructor.

ENG 497 Project: Writing (1-3,0,1-3) Independent study for advanced students undertaking projects in creative, expository, or journalistic writing. May be taken twice for a total of 6 semester hours. PREREQ: written consent of a fulltime member of the Faculty of Literature and Language.

ENG 499 Independent Study of American Literature (1-3,0,1-3) Open to outstanding students. PREREQ: 6 semester hours of literature and consent of instructor.

ENG 499 Independent Study of British Literature (1-3,0,1-3) Open to outstanding students. PREREQ: 6 semester hours of literature and consent of instructor.

ENG 500 Poetry $(3,0,3)$ Advanced study of poetry. May be repeated for credit when topics vary. PREREQ: 6 semesters of literature at the undergraduate level or graduate standing.

ENG 501 Drama (3,0,3) Advanced study of dramatic literature. May be repeated for credit when topics vary. PREREQ: 6 semesters of literature at the undergraduate level or graduate standing.

ENG 505 Medieval Literature $(3,0,3)$ Advanced study of literature from the Medieval period. May be repeated once for credit when topics vary. PREREQ: 6 semesters of literature at the undergraduate level or graduate standing.

ENG 515 Renaissance Literature (3,0,3) Advanced study of literature from the Renaissance. May be repeated once for credit when topics vary. PREREQ: 6 semesters of literature at the undergraduate level or graduate standing.

ENG 525 Restoration and 18th-century Literature (3,0,3) Advanced study of Restoration and 18th-century literature. May be repeated once for credit when topics vary. PREREQ: 6 semesters of literature at the undergraduate level or graduate standing.

ENG 530 Readings in the English Language $(3,0,3)$ Topics about the language and its use: specialized readerships, applications, and theories. May be repeated for credit when topics vary. PREREQ: 6 semester hours of literature at the undergraduate level.

ENG 531 English Grammar for Teachers of ESOL (2,0,2) Review of English grammar from pedagogical point of view. Does not count toward English major. PREREQ: 6 semester units of literature and consent of instructor.

ENG 540 Problems in English $(3,0,3)$ Pedagogical topics such as rhetoric, literary analysis, and evaluation of student work; topics suitable for elementary and sec-
ondary teachers. May be repeated for credit when topics vary. PREREQ: 6 semester hours of literature at the undergraduate level.

ENG 541 Linguistics for Teachers of ESOL $(2,0,2)$ Overview of linguistics for teachers of ESOL. Does not count toward English major. PREREQ: 6 semester units of literature and consent of instructor.

ENG 544 Research Methods in Prof Writing 3,0,3) Introduction to key theories and research methods in professional writing. PREREQ: Graduate standing or consent of instructor.

ENG 546 Grant Writing $(3,0,3)$ Theory and practice of preparing and analyzing grant applications. Special focus on the grant process in academic settings. Open to graduate students and, with permission of instructor, advanced undergraduate students.

ENG 556 Composition/Rhetoric Theory and Pedagogy (3,0,3) Advanced study in composition/rhetoric. May be repeated for credit when topics vary. PREREQ: six semesters of literature at the undergraduate level or graduate standing.

ENG 560 American Literature Before 1865 (3,0,3) Advanced study of American literature written before 1865. May be repeated once for credit when topics vary. PREREQ: six semester of literature at the undergraduate level or graduate standing.

ENG 565 American Literature After 1865 (3,0,3) Advanced study of American literature written after 1865. May be repeated once for credit when topics vary. PREREQ: six semesters of literature at the undergraduate level or graduate standing.

ENG 575 20th Century British Literature (3,0,3) Advanced study of British literature written in the twentieth century. May be repeated once for credit when topics vary. PREREQ: six semesters of literature at the undergraduate level or graduate standing.

ENG 580 Studies in Literature $(3,0,3)$ Special topics in literature; genres, interdisciplinary subjects, individual authors. May be repeated for credit when topics vary. PREREQ: 6 semester hours of literature at the undergraduate level.

ENG 581 Major Authors (3,0,3) Advanced study of one or more major literary authors. May be repeated for credit when topics vary. PREREQ: six semesters of literature at the undergraduate level or graduate standing.

ENG 582 Special Topics $(3,0,3)$ Advanced study of special topics in literary studies. May be repeated once for credit when topics vary. PREREQ: six semesters of literature at the undergraduate level or graduate standing.

## Entrepreneurship ENTP

ENTP 150 Overview of Accounting (3,0,3) Introduction to financial information generated by typical business organizations, with special emphasis on the use and interpretation of this information in managerial and financial decision-making processes by entrepreneurs. Enrollment priority given to ENTP minors. May not be substituted for ACC 200. ENTP 150 will be waived for students who have credit for ACC 200 and ACC 201. Same as ACC 150.

ENTP 200 Introduction to Entrepreneurship (1,0,1) Overview course using applied learning to introduce students to entrepreneurship. Open to students not certified as business majors.

ENTP 250 Fundamentals of Management and Marketing (3,0,3) Introduction of basic concepts, applications and techniques of management and marketing in organizations. Open to students not certified as business majors.

ENTP 300 New Venture Creation (3,0,3) This course presents an overview of entrepreneurship. During the semester we will examine entrepreneurs and the entrepreneurial mindset; learn to recognize and create opportunity; develop and test the business concept; assess the industry and analyze risks associated with customers, markets, financial considerations and legal concerns. Students will come away with a clear understanding of what entrepreneurship is and how they can use the entrepreneurial mindset to succeed in their chosen career. PREREQ: junior standing.

ENTP 333 New Venture Management $(3,0,3)$ As an integrative course in management; this class emphasizes managing growing companies in an increasingly professional manner, while maintaining a spirit of entrepreneurship. Topics will include strategic and operational planning, financial planning and measuring and controlling performance; managing innovation, marketing the entrepreneurial organization, managing human resources in rapidly growing firms, and exit strategies. PREREQ: ENTP 300.

ENTP 375 Marketing Strategies for Entrepreneurial Businesses (3,0,3) A strategic marketing process approach will be illustrated emphasizing the design of entrepreneurial marketing plans; the innovation and new product or service process; implementation of product, price, place and promotion goals; and, methods of evaluation and control. PREREQ: ENTP 300.

ENTP 376 New Venture Financing (3,0,3) Many new ventures and innovation fail due to inadequate funding. Major sources of funding for new ventures are reviewed and evaluated in this course, including: venture capital, informal investors, banks, investment banks, suppliers, buyers and the government. Some of the topics for this course include valuation, "guerilla financing," joint ventures, strategic alliances, private placements, IPOs and management buyouts. PREREQ: ENTP 150 or ACC 200 and ACC 201, ENTP 300.

ENTP 377 Family Business Management $(3,0,3)$ This course provides an overview of the importance of family firms and the unique problems and opportunities they face. Family businesses represent the interests of two distinct, yet overlapping institutions: the firm and the family. Actual family business case studies are used to examine these issues. Family business owners serve as invited speakers. PREREQ: ENTP 300

ENTP 378 Emerging Enterprise Law (3,0,3) This course involves the study of legal issues surrounding emerging enterprises, including, new venture formation, choice of legal entity, financing, siting and leases, intellectual property, debtor-creditor relations, contracts and employment law. PREREQ: ENTP 300.

ENTP 379 Corporate Entrepreneurship (3,0,3) This course is designed to explore the concepts of change, innovation, and corporate venturing. Issues associated with entrepreneurial behavior and the development and implementation of programs to encourage entrepreneurship (creating value through innovation) in midsize and large firms are explored. PREREQ: ENTP 300.

ENTP 396 Entrepreneurial Internship $(3,0,3)$ Students will intern at a nascent or early stage business venture that will provide the student an opportunity to learn to apply entrepreneurial problem solving skills and theoretical knowledge obtained through coursework to actual business situations and problems. The student should plan on spending a minimum of 10 hours per week for 10 weeks at the internship. PREREQ: ENTP 333.

ENTP 497 Senior Portfolio: Writing the Business Plan (3,0,3) Students will study the basic components and varied audiences for the business plan. Each student will write a business plan and will be required to present the plan to a panel of business leaders. PREREQ: ENTP 150 or ACC 200 and 201, and ENTP 333; senior standing and certification of major in business or declared minor in ENTP.

ENTP 499 Independent Study: Entrepreneurship (1-3 sem. hrs.) Students pursue a topic or project of interest to them. Meeting times arranged with instructor. Open only to students certified as majoring in business or by consent of instructor. PREREQ: ENTP 300, senior standing and certification of major in business or declared minor in ENTP.

## Environmental Science ENV

ENV 110 Introduction to Environmental Science (3,0,3) A non-laboratory introduction to the basic tenets of Environmental Science and Environmental Issues including the biological and physical components of ecosystems, the impact of resource development, management and pollution on the functionality of ecosystems and the well being of the living community, and the economic, political and legal aspects of environmental decision making. A requirement for entry into the Environmental Science program. A general education course (natural science).

ENV 115 Orientation to Environmental Science Careers (0,3,1) An introduction to environmental careers and post-graduate options. Activities will include visits to local businesses, corporations, agencies, and organizations specializing in environmental work.

ENV 255 Literature and Research (3,0,3) Information retrieval and presentation, introduction to environmental literature. Scientific methodology including research problem selection, experimental design, literature survey, and proposal development. A course for the sophomore year. PREREQ: BIO 151 and ENV 110.

ENV 291W Advanced Writing in Environmental Science (3,0,3) Introduction to scientific literature, experimental design, research, and proposal development. Advanced techniques in information search and retrieval, scientific writing, and effective presentation. A general education course (Written Communications). PREREQ: ENG 101, ENV 110.

ENV 350 Environmental Toxicology $(3,0,3)$ A non-laboratory course designed for the junior year covering the principles of environmental toxicology. The content focuses on properties of toxic chemicals that influence their distribution and transformation in the environment; action of environmental forces that affect toxicant breakdown, movement, and accumulation; sources and occurrences of major classes of environmental toxicants, and risk assessment. PREREQ: BIO 304, BIO 304L and CHE 311.

ENV 380 Field Methods in Environmental Sciences (2,0,2) This is a laboratory and field course designed to expose students to the methods of data and sample collection most commonly used in environmental sciences. Due to the variable nature of sampling and analytical techniques, this course will meet 4 hours per week. During laboratory exercises this will be 2 hours twice weekly; during field sampling this will be 4 hours on a Saturday.

ENV 396 Internship: Environmental Science (3,0,3) Experiential learning at institutions, universities, or businesses specializing in Environmental work. Course may be repeated for new internship project; up to 6 semester hours may be earned in this course. Open only to students majoring in Environmental Science. PREREQ: permission of instructor.

ENV 400 Seminar: Environmental Science (1,0,1) Discussion and analysis of current environmental problems. For juniors and seniors majoring in environmental science or minoring in environmental studies.

ENV 492 Directed Research in Environmental Science (1-3 semester hours) Development and completion of a research project chosen in conjunction with instructor and approval of environmental science director. Final project report is required. Up to 6 semester hours may be earned in this course. For students majoring in environmental science. Fall, Spring, Summer. PREREQ: ENV 255 and permission of instructor.

ENV 494 Topics: Environmental Science $(1,0,1)$ Discussion and analysis of current environmental problems. For junior and senior students major/minor in environmental science. Spring.

ENV 494 Special Topics: Environmental Science (1-3 sem.hrs.) Special training in Occupational Safety and Health Administration (OSHA) regulations, hazardous material handling, radiation safety, chain of custody of data, reports and samples, rapid bioassessment techniques, etc. Topics and number of hours credited will vary according to course availability, interest and need of students. These topics may be taught by agencies/employees outside the university. The nature of the material requires a flexible schedule and courses may actually occur as 40 hours during one week. A schedule and description of material will be made available during priority registration. Summer. PREREQ: ENV 340.

ENV 578 Environment Issues for Educators (1,4,3) Information and application of environmental issues for classroom use. Interrelationship of local issues and global issues. Required field trips. PREREQ: Permission of instructor.

## Finance <br> FIN

FIN 205 Personal Financial Management (3,0,3) Practical and realistic methods to manage the basic concepts of personal finances effectively; covers the basics related to managing your personnel assets, credit, insurance, investments, retire-
ment and estate planning. Not open to students with credit for FIN 310. PREREQ: sophomore standing.

FIN 305 Principles of Finance $(3,0,3)$ Basic concepts in finance including security markets, interest rates, taxes, risk analysis, time value of money, security valuation, short term financial planning, capital budgeting, and capital structure. PREREQ: ACC 205 or ACC 200-201, STA 212, and junior standing.

FIN 310 Financial Planning and Practice ( $3,0,3$ ) Personal financial planning from a professional planning viewpoint; covers asset management, credit, taxes, insurance needs, investments, retirement and estate planning. PREREQ: ACC 200-201 and junior standing.

FIN 315 Financial Management (3,0,3) Financial management concepts relating to dividend policy, capital structure theory, working capital management, common stock and bond issuance, hybrid financing, mergers, and acquisitions. PREREQ: FIN 305 and junior standing; COREQ: FIN 310.

FIN 320 Financial Planning Process and Taxation (3,0,3) Practical approach to basic tax structure pertaining to individuals and businesses and its importance in financial planning; individual financial planning decisions and their tax implications. PREREQ: FIN 305, FIN 310, and junior standing.

FIN 325 Capital Budgeting ( $3,0,3$ ) Principles of capital budgeting applied to project evaluations in a case study environment; decision making under certainty and uncertainty, ranking techniques, cost of capital estimation, and hurdle rates; abandonment decision; leasing alternative; role of capital budgeting in the strategic decision making process of the firm. PREREQ: FIN 305, FIN 315 and junior standing.

FIN 335 Working Capital Management (3,0,3) Management of short term assets and liabilities; determining the optimal holdings of cash, inventory, and accounts receivables as well as their financing; cases used extensive use of cases to relate concepts to actual decisions made by firms. PREREQ: FIN 305, FJIN 315 and junior standing.

FIN 345 Investment and Security Analysis $(3,0,3)$ Structure and regulation of security markets, capital market theory, portfolio theory, analysis of securities and opportunities, evaluation of portfolio goals, sources of investment information, and introduction to derivatives. PREREQ: FIN 305, FIN 310 and junior standing.

FIN 355 Principles of Risk Management and Insurance (3,0,3) Fundamental principles of risk and insurance; applications to risk situations and pension and group insurance. PREREQ: FIN 305, FIN 310 and junior standing.

FIN 365 Financial Markets and Institutions (3,0,3) Advanced coverage of financial markets and institutions and their role in the history of the US financial system. Coverage includes a discussion of financial market history, interest rate theory, financial and currency derivatives, international implications for financial markets and institutions and current topics. PREREQ: FIN 305, FIN 315 and junior standing.

FIN 375 Commercial Bank Management (3,0,3) Management processes and operations in commercial banks; economic significance of the commercial bank industry and its contribution to business development. PREREQ: FIN 305, FIN 315 and junior standing.

FIN 385 Financial Planning Process and Estate Planning (3,0,3) Theoretical and practical approach to estate planning; estate and gift taxes, wills, trusts, and estate planning techniques and application of these techniques in overall financial planning. PREREQ: FIN 305, FIN 310, and junior standing.

FIN 394 Topics: Finance (3,0,3) Specialized topics of faculty and student interest. Topics vary and may include advanced derivative securities, financial engineering, advanced corporate finance, advanced financial planning, financial ethics, and risk management. May be repeated for a maximum of 6 semester hours if topics differ. PREREQ: FIN 305, FIN 315 and junior standing.

FIN 405 Derivative Securities $(3,0,3)$ Definition and explanation of various risk transfer devices such as options involved in trading these securities, hedging and speculating with options and futures, supervision, regulation, and tax conse-
quences of futures and options trading. PREREQ: FIN 305, FIN 315; certified major in any business program.

FIN 415 International Finance $(3,0,3)$ Financial decision making process in a multinational environment, effects of devaluation expectations, foreign exchange, investment controls; case study materials related to actual decisions by multinational firms. PREREQ: FIN 305, FIN 315; certified major in any business program.

FIN 435 Case Studies in Corporate Finance (3,0,3) Analysis of finance problems through use of case studies; oral and written presentations of case solutions. Recommended to be taken during the last 18 semester hours of business coursework. PREREQ: FIN 305, FIN 315, certified major in finance.

FIN 445 Retirement Planning and Employee Benefits $(3,0,3)$ Concepts of retirement planning and employee benefits and the application of these concepts to overall financial planning for individual and businesses. PREREQ: ACC 320, FIN 305 and FIN 310 and certified major in any business program.

FIN 450 Advanced Investment Analysis (3,0,3) An in depth continuation of the material begun in FIN 345. The course will cover valuation models, portfolio formation, options and futures markets, security selection techniques and financial statement analysis. PREREQ: FIN 305, FIN 310, FIN 315, FIN 345 and certified major in any business program.

FIN 499 Independent Study: Finance $(3,0,3)$ Student investigation of a finance topic or completion of a project. Topics, meeting times, and outcomes arranged with instructor. PREREQ: FIN 305, FIN 315, certified major in any business program, and consent of instructor.

## French <br> FRE

FRE 101 Elementary French I $(3,1,4)$ Basic principles; development of skills in reading, writing, pronunciation, and conversation. A general education course (humanities).

FRE 102 Elementary French II $(3,1,4)$ Continuation of FRE 101. A general education course (humanities). PREREQ: For students who have completed FRE 101 or equivalent.

FRE 180 Elementary Individualized Programmed Instruction in French $(1,0,1)$ Individual work for students desiring additional instruction in grammar, pronunciation, vocabulary and cultural topics. May be repeated once for credit. PREREQ: FRE 101 or equivalent and consent of instructor.

FRE 201 Intermediate French I $(3,0,3)$ Review and extension of basic language skills learned in FRE 101 and FRE 102; reading and discussion of cultural, linguistic, and literary subjects. A general education course (humanities). PREREQ: For students who have completed FRE 102 or equivalent.

FRE 202 Intermediate French II $(3,0,3)$ Continuation of grammar review and enhancement of language skills begun in FRE 201; consideration of cultural and literary subjects. A general education course (humanities). PREREQ: For students who have completed FRE 201 or equivalent.

FRE 250 Business French ( $3,0,3$ ) A study of language for broad commercial purposes; cultural awareness in both social and professional situations; historic and contemporary views of government, labor, media, and industrial organization in Francophonic countries; business correspondence; Franco-American relations. PREREQ: FRE 202.

FRE 280 Individualized Programmed Instruction in French (1,0,1) Individual work for students desiring additional instruction in grammar, pronunciation, vocabulary and cultural topics. May be repeated once for credit. PREREQ: FRE 201 or equivalent and consent of instructor.

FRE 304 French Composition and Conversation (3,0,3) Advanced practice in writing French compositions and in oral conversation skills. PREREQ: FRE 202 or equivalent.

FRE 310 French Culture and Society Today (3,0,3) Basic aspects of contemporary French culture and society; reading and discussion of articles from leading

French magazines, newspapers, and representative texts; comparison of French and American behavior and attitudes. PREREQ: FRE 202 or equivalent or consent of instructor.

FRE 311 French Cultural History ( $3,0,3$ ) Eras, institutions, and issues in the history of France; readings primarily in French. PREREQ: FRE 202 or equivalent.

FRE 320 Survey of French Literature (3,0,3) Overview of major authors and movements from Old French to the 20th century. A general education course (literature or humanities). PREREQ: FRE 202 or equivalent and 3 semester hours of literature.

FRE 322 French Drama ( $3,0,3$ ) Study of major authors and texts in the history of French theater, including representative 20th century playwrights; readings in French. May be repeated when topics vary. PREREQ: FRE 202 or equivalent.

FRE 323 French Prose Fiction ( $3,0,3$ ) Study of representative masters of the French novel and short fiction from the 18th century to the present; readings in French. May be repeated when topics vary. PREREQ: FRE 202 or equivalent.

FRE 350 Methods of Teaching French $(3,0,3)$ Theoretical and practical considerations of teaching French in secondary schools. Required of all students seeking teaching certification in French. PREREQ: 6 semester hours of French at the 300 level or above.

FRE 480 Topics in French Culture (3,0,3) Topics in culture and language of French speaking countries. May be repeated for credit as topics vary. PREREQ: 6 semester hours of French at the 300 level or above or consent of instructor.

FRE 481 Topics in French Literature (3,0,3) Topics in literature, literary history, and literary theory. May be repeated for credit when topics vary. PREREQ: 6 semester hours of French at the 300 level or above or consent of instructor.

FRE 499 Independent Study: French (1-3,0,1-3) Readings in language and literature; readings in scientific literature. PREREQ: consent of instructor.

FRE 520 Readings in French $(3,0,3)$ Various literary, linguistic, cultural, and pedagogical topics. May be repeated for credit when topics vary. PREREQ: 300level French course.

## Geography GEO

GEO 100 Geography Through Contemporary World Issues (3,0,3) This course introduces geography through a framework of timely contemporary issues that are shaping the globalization processes of our present and future world. Will include issues of pressing concern in the following areas: environment, population, economic, technological, information, conflict, and governance. A general education course (social sciences).

GEO 101 World Regional Geography $(3,0,3)$ The world's regions; settlements, resource use, culture groups, and political patterns. A general education course (social sciences).

GEO 101H Honors World Regional Geography $(3,0,3)$ The world's regions; settlements, resource use, culture groups, and political patterns. A general education course (social sciences).

GEO 102 Geography of the World's "Developed" Regions (3,0,3) Anglo-American, Europe, the former Soviet Union, Japan, Australia, and New Zealand.

GEO 103 Geography of the Third World (3,0,3) "Under-developed" countries; culture areas and economic regions in Africa, Latin America, and Asia. A general education course (social sciences).

GEO 304 Political Geography and Geopolitics $(3,0,3)$ Examines the role of geography in the political process at both the domestic and international scales. Addresses the ways in which nation-states structure and organize territories. PREREQ: 3 hours of Geography or consent of instructor.

GEO 107 Diversity Mapped $(3,0,3)$ Regional and local patterns of race/ethnicity and gender of the U.S.; social, economic, and political factors that underlie these
patterns; basic skills in reading and analyzing thematic maps. A general education course (social sciences).

GEO 108 Introduction to Physical Geography $(3,0,3)$ Physical phenomena of the environment; patterns of energy and moisture endowments at the earth atmosphere interface described, analyzed spatially, and related to climatic and land form distributions on earth.

GEO 301 Urban Geography $(3,0,3)$ Cities from inter urban and intra urban perspectives; evolution of cities and urban areas; their internal structure and the dilemmas they face.

GEO 302 Cultural Geography $(3,0,3)$ Impact of various cultures on landscape; distribution of culture traits; development of culture areas.

GEO 303 Economic Geography $(3,0,3)$ Spatial distribution of primary, secondary, tertiary, quaternary, and quinary economic activities; theoretical approaches stressed.

GEO 306 Environmental Resource Management (3,0,3) Spatial issues of resources management; water and air pollution, solid wastes, energy, land use planning, wilderness preservation, and population pressures; interaction of ecosystems.

GEO 307 Perception of the Environment (3,0,3) How people perceive space and the features of their physical environment; mental maps, the perception of natural hazards, and space motion patterns.

GEO 308 Climatology $(3,0,3)$ Physical basis of climate and weather; distribution of climatic types.

GEO 309 Historical Geography of the United States $(3,0,3)$ Spread of settlement, growth of urbanization, and development of economic and culture regions; past and present distribution of religious groups, European ethnic groups, and Afro-Americans. Same as HIS 426.

GEO 310 Geography of Population $(3,0,3)$ Spatial distribution of world population; regional variations of growth rates, standards of living, urban/rural densities, migration patterns, and environmental impact of populations, especially African, Native American, and European.

GEO 314 Maps and Map Interpretation (3,0,3) Map reading and interpersonal skills, overview of map sources; surveying, interpretation of aerial photographs, remote sensing data and Geographic Information Systems. PREREQ: 3 semester hours of geography.

GEO 315 Cartography $(3,0,3)$ Cartographic drawings, map symbolism, and map design; various map projections are studied with regard to possible uses.

GEO 318 Geographic Information Systems $(3,0,3)$ Introduction to the theories, principles, construction methods, and applications of geographic information systems; employment of a vector based GIS software package to manipulate spatial data and associated geo-referenced databases. PREREQ: 3 semester hours of geography.

GEO 319 Remote Sensing of the Environment $(3,0,3)$ Introduction to the principles, characteristics and applications of environmental remote sensing; concepts and foundations of remote sensing, photographic systems and interpretation, thermal and multispectral scanning, radar systems, satellite remote sensing, and digital image processing. PREREQ: 3 semester hours of geography or consent of instructor.

GEO 327 Field Mapping in Geography (3,0,3) Field mapping and field exploration in the geography of Kentucky; overview of primary mapping techniques such as Surveying, Global Positioning System (GPS) and Remotely Sensed data. Ground truthing of image data and classification results and introduction to techniques of sampling, observation and spatial location procedures. Class includes a weekend field trip. PREREQ: 3 semester hours of geography.

GEO 330 Geography of Religion ( $3,0,3$ ) Distribution of religions with a strong emphasis on the areal spread of various religions; impact of religion on landscape and on the environmental settings of several religions; changing religious patterns in the United States.

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GEO 340 Sustainable Food Systems (3,0,3) Production processes and environmental impacts of agriculture, food manufacturing, food retailing in U.S. Land ownership patterns, subsistence food production, and cash crop production in developing world. Sustainable alternatives in U.S. and developing world.

GEO 370 Geography Methods and Applications $(1,0,1)$ Applications of the core elements of geography and synthesizes fundamental geographical knowledge. Serves as a capstone for Geography major. PREREQ: Consent of instructor.

GEO 385 Transformation of Geography in Modern Times $(3,0,3)$ Considers the history and philosophy of geography in the modern Western world. Examines the core literatures, debates, research trajectories, professional applications, and methodologies within the field of Geography in the modern period. PREREQ: 3 hours of geography or consent of instructor.

GEO 394 Special Topics: Geography $(3,0,3)$ Study of specialized topics in geography not covered through regular curriculum. Subfields will vary according to the interest of the instructor and will be listed in the on-line schedule of classes. May be repeated as topics change. PREREQ: 3 semester hours of geography.

GEO 402 Geography of Europe $(3,0,3)$ Physical, cultural, economic, and political patterns of Europe (excluding the former Soviet Union); continent-wide patterns of various characteristics as well as individual countries are considered.

GEO 403 Geography of Africa $(3,0,3)$ Physical, cultural, economic, and political patterns of Africa, primarily south of the Sahara.

GEO 406 Geography of Latin America (3,0,3) Middle and South America's spatial characteristics, physical setting, social characteristics and economic structure.

GEO 407 Local Community: A Geographic Analysis $(3,0,3)$ Geography of the urban community; basic ideas of regional planning. PREREQ: GEO 100.

GEO 409 Geography of North America $(3,0,3)$ The continent's areal differences in physiography, climate, culture, and economic systems; synthesis of various spatial characteristics to form distinct regions. PREREQ: 3 semester hours of geography.

GEO 410 Geography of Asia $(3,0,3)$ Physical and social geography of major regions; transformation of pre-colonial economic and cultural institutions by world economic integration; evaluation of successes and failures of economic development. PREREQ: 3 semester hours of geography.

GEO 412 Geography of South Asia and the Middle East (3,0,3) Geo-political, bio-physical, religious and social aspects of South Asia and the Middle East. PREREQ: consent of instructor.

GEO 492 Directed Research: Geography $(3,0,3)$ Independent work on research project agreed upon by student and instructor. PREREQ: 3 semester hours of geography.

GEO 496 Internship: Geography (3-6 sem. hrs.) Placement in public agency or private business for supervised experience in applying geographic concepts and techniques; meetings with faculty and with other internship students. Graded pass/fail. PREREQ: 3 semester hours of geographer.

GEO 499 Directed Readings: Geography $(3,0,3)$ Individually supervised readings on a selected area of geography. PREREQ: 3 semester hours of geography and consent of instructor.

GEO 502 Geography of Kentucky $(3,0,3)$ Cultural, physical, economic, and population characteristics of Kentucky; Kentucky's regional and national importance.

GEO 507 The Local Community: A Geographic Analysis (3,0,3) A site-based examination of specific regional features, including cultural heritage infrastructure, tourist infrastructure, or a range of other urban and regional planning issues. May include a service learning component. PREREQ: 3 semester hours of Geography on consent of instructor.

GEO 520 Environmental Resources $(3,0,3)$ Study of such environmental problem areas as energy use, population growth, deforestation, toxic wastes, land-
scape conservation, and sustainable uses, with a focus on classroom applications and management challenges; may include a service learning component. PREREQ: 3 semester hours of geography.

GEO 540 Cultural Geography of Asia $(3,0,3)$ Selective consideration from among broad range of themes in the cultural geography of Asia, such as environmental sustainability, political processes, urbanization, religion, nationalism, recreation, and domestic habitation. May be repeated once for credit when topics vary. PREREQ: GEO 410 or consent of instructor.

GEO 594 Selected Topics: Geography (3,0,1-3) Study of selected topics. Subfields will be chosen in keeping with interest of the instructor and will be listed in Schedule of Classes. May be repeated for credit when topics vary.

## German <br> GER

GER 101 Elementary German I $(3,1,4)$ Fundamentals; development of skills in grammar, pronunciation, conversation, and reading. A general education course (humanities).

GER 102 Elementary German II $(3,1,4)$ Continuation of GER 101. A general education course (humanities). PREREQ: For students who have completed GER 101 or equivalent.

GER 180 Elementary Individualized Programmed Instruction in German $(1,0,1)$ Individual work for students desiring additional instruction in grammar, pronunciation, vocabulary and cultural topics. May be repeated once for credit. PREREQ: consent of instructor.

GER 201 Intermediate German I $(3,0,3)$ Review and extension of basic language skills learned in GER 101 and GER 102; reading and discussion of cultural, linguistic, and literary subjects. A general education course (humanities). PREREQ: For students who have completed GER 102 or equivalent.

GER 202 Intermediate German II $(3,0,3)$ Continuation of grammar review and enhancement of language skills begun in GER 201; consideration of cultural and literary subjects as well. A general education course (humanities). PREREQ: For students who have completed GER 201 or equivalent.

GER 250 Business German $(3,0,3)$ Introduction to German business terminology and practice in writing and translation of business letters. For students majoring in business and others seeking to broaden their career opportunities. PREREQ: GER 201 or appropriate placement score.

GER 280 Individualized Programmed Instruction in German (1,0,1) Individual work for students desiring additional instruction in grammar, pronunciation, vocabulary and cultural topics. May be repeated once for credit. PREREQ: consent of instructor.

GER 304 German Composition and Conversation (3,0,3) Advanced practice in writing German compositions and in oral conversation skills. PREREQ: GER 202 or appropriate placement score.

GER 310 Contemporary German Life $(3,0,3)$ Key issues in Germany since World War II as reflected in works of contemporary German authors. May be repeated once for credit as topics vary. PREREQ: GER 202 or appropriate placement score.

GER 311 German Cultural History ( $3,0,3$ ) Eras, institutions, and issues in the history of Germany; readings primarily in German. PREREQ: GER 202 or appropriate placement score.

GER 313 Practice in Reading $(1,0,1)$ Reading from journals or materials in the student's own discipline or field of interest. PREREQ: GER 202 or appropriate placement score.

GER 320 Survey of German Literature (3,0,3) Overview of major authors and movements from the Middle Ages to the 20th century. A general education course (literature or humanities). PREREQ: GER 202 or appropriate placement score.

GER 322 German Drama $(3,0,3)$ Study of major authors and texts in the history of German theater, including representative twentieth century playwrights; readings in German. May be repeated when topics vary. PREREQ: GER 202 or appropriate placement score.

GER 323 German Prose Fiction $(3,0,3)$ Focus on novel, novella, or short story. May be repeated for credit as topics vary. PREREQ: GER 202 or appropriate placement score.

GER 350 Methods of Teaching German $(3,0,3)$ Theoretical and practical considerations of teaching German in secondary schools. Required of all students seeking teaching certification in German. PREREQ: GER 202 or appropriate placement score

GER 480 Topics in German Culture $(3,0,3)$ Topics in culture and language of German-speaking countries. May be repeated for credit as topics vary. PREREQ: GER 202 or appropriate placement score

GER 481 Topics in German Literature $(3,0,3)$ Topics in literature, literary history, and literary theory. May be repeated for credit when topics vary. PREREQ: GER 202 or appropriate placement score

GER 499 Independent Study: German (3-1,0,1-3) Readings in language and literature; readings of scientific literature. PREREQ: consent of instructor.

GER 520 Readings in German $(3,0,3)$ Various literary, linguistic, cultural, and pedagogical topics. May be repeated for credit when topics vary. PREREQ: consent of instructor.

## Geology <br> GLY

GLY 105 The Earth Explored $(3,0,3)$ Development of geologic thought; volcanoes, plate tectonics, fossils, sculpturing of the earth's surface by wind, water, etc. Telecourse based on fourteen 30 -minute programs on geology. Supplementary print material used. Not applicable to major or minor in geology.

GLY 110 The Face of the Earth with Laboratory $(3,2,4)$ Occurrence, formation, accumulation, and availability of minerals and rocks as earth resources; geological agents and processes that modify the earth's surface; study of local rock types to explain their origin. Field trips. A general education course (natural sciences).

GLY 120 This Dangerous Earth (3,0,3) A study of the ways in which geology affects our society including geologic hazards such as volcanoes, earthquakes, landslides, flooding and coastal erosion as well as the pollution of our soil and water resources. Emphasis is placed on environmental geologic conditions in the Tri-State. A general education course (natural science).

GLY 130 Dinosaurs (3,0,3) Exploration of principles of geology and paleontology through the study of dinosaur biology and paleoeocology. A general education course (natural science).

GLY 150 Introduction to Field Paleontology $(0,6,3)$ Introduction in methods of field paleontology. This will include safety procedures, collection and documentation of samples and methods of scientific protocol for sample preservation.

GLY 155L Regional Geology Laboratory (01,1) A laboratory experience to study the geology of the Cincinnati/Northern Kentucky region, the geologic history of the region and the ways the past geologic processes have acted to create the present landscape. A general education course (natural science). COREQ: a 100 level or 200 level geology course.

GLY 220 History of the Earth $(3,0,3)$ An introduction to the origin of the Earth, including plate tectronics, mountain building, the evolution of life as interpreted from the fossil record, mass extinctions and catastrophic geologic events. Emphasis is placed on the geologic history and fossil record of the tri-state region. A general education course (natural science).

GLY 230 Geology of National Parks $(3,0,3)$ A study of the principals of physical geology using national parks as examples to illustrate the concepts presented. This will include the formation and occurrence of rocks and minerals, the internal processes that have acted to form underlying rock structures and the surfa-
cial processes that have acted to form current landforms. A general education course (natural science).

GLY 240 Natural Resources, Energy and the Environment (3,0,3) Geologic factors that affect the origin, development and use of our metallic, non-metallic and energy resources. Topics include the geologic processes of resource formation, geologic and economic factors that determine suitability for use and environmental impacts resulting from development. A general education course (natural science).

GLY 250 Geology of Northern Kentucky (2,1,3) Geology and geologic history of Kentucky and the central Ohio River valley, including bedrock structure and stratigraphy, fossils, landforms and regional setting. Geologic hazards and processes currently modifying the geologic environment are emphasized. Field trips required. Summers only. A general education course (natural science). PREREQ: GLY 110.

GLY 294 Topics: Geology (1-3 sem. hrs.) Special topics in geology. Repeatable for a maximum of 12 semester hours. PREREQ: consent of department chair.

GLY 315 Structural Geology with Laboratory (3,2,4) Primary and secondary structures of the earth's crust. PREREQ: Three credit hour geology course.

GLY 325 Geology of the Planets $(3,0,3)$ Geological features and history of the inner planets, satellites of the gas giants, asteroids and other small solid bodies. Same as AST 325. PREREQ: Three credit hour geology course or AST 110.

GLY 330 Geomorphology with Laboratory $(3,2,4)$ Description and interpretation of land forms. PREREQ: GLY 110.

GLY 335 Earth Materials $(2,4,4)$ Study of the physical and chemical properties of common rock and ore forming minerals and the igneous, metamorphic and sedimentary rock types that they form. The origin and development of rock systems. PREREQ: GLY 110.

GLY 340 Introduction to Environmental Geoscience (2,1,3) Human interaction with the earth's geological aspects; natural hazards, water resources, waste disposal, energy, mineral resources, and land use and planning. Laboratory component included. PREREQ: Three credit hour geology course

GLY 341 Soil Science $(3,0,3)$ A study of the way in which soils and geologic conditions influence environmental conditions and projects. Soil formation and soil properties to include composition and water relationships as well as erosion theory and control and re-vegetation will be covered. PREREQ: GLY 110.

GLY 350 Field Paleontology $(0,6,3)$ Instruction in methods of field paleontology. This will include safety procedures, collection and documentation of samples and methods of scientific protocol for sample preparation. Students will identify and describe the results of paleontological collection and present the results for critical review. PREREQ: 6 hours of geology.

GLY 392 Directed Research: Geology (1-3 sem. hrs.) Supervised research in an area of geology currently under investigation by one or more of the geology faculty. Repeatable for a maximum of 9 semester hours. PREREQ: junior standing.

GLY 394 Seminar: Geology $(1,0,1)$ Repeatable to a maximum of 4 semester hours. PREREQ: Junior standing or consent of instructor.

GLY 397 Special Projects: Geology (1-3 sem. hrs.) Completion of an independent project in geology. Repeatable for a maximum of 6 semester hours. PREREQ: junior standing.

GLY 399 Readings: Geology (1-3 sem. hrs.) For students able to do independent work. Repeatable to a maximum of 6 semester hours. PREREQ: 20 semester hours in geology.

GLY 402 Invertebrate Paleontology with Laboratory (3,2,4) Major phyla in the fossil record; paleobiological, systematic, and evolutionary aspects; collection and classification of local fossils. Same as BIO 405. PREREQ: Six hours of geology courses.

GLY 416 Geologic Field Methods $(\mathbf{1 , 6 , 3})$ Introduction to the principles of geologic field methods applied to the mapping of geologic structures and the inter-
pretation of geologic history. Course integrates the concepts of geologic investigation through field exercises in the Rocky Mountains. PREREQ: Six hours of geology courses.

GLY 420 Stratigraphy and Sedimentation with Laboratory (3,2,4) Physical and biological bases of stratigraphy; processes of formation and environments of deposition of sedimentary rocks. PREREQ: Six hours of geology courses.

GLY 435 Sedimentary Petrology and Petrography $(2,4,4)$ Students will use petrographic analysis to identify clastic and chemical sedimentary minerals. Students will use this analysis to identify sedimentary rocks and to evaluate sedimentary rocks for geologic history as well as for economic applications. PREREQ: GLY 335.

GLY 440 Applied Geophysics $(2,2,3)$ Investigate the distribution of geological materials and their geophysical properties in the shallow subsurface using geophysical field techniques in terms of basic theory, data collection and interpretation.

GLY 450 Hydrogeology with Laboratory (2,4,4) Overview of groundwater's physical and chemical properties and their corresponding principles as they pertain to geologic environments. PREREQ: Six hours of geology. and MAT 128 or MAT 129 or STA 205.

GLY 455 Groundwater Resources and Management with lab $(2,4,4)$ Geologic and hydrologic factors that control the management of groundwater resources; emphasis placed on groundwater management, groundwater quality and groundwater remediation. PREREQ: GLY 450.

GLY 461 Ecology and Geology of Coral Reefs $(3,3,4)$ Ecological and geological processes in reef ecosystems. Benthic and pelagic biotic communities, reef development and erosion, seidmentation, ancient and modern reefs, responses to environmental change. Required field trip to marine research laboratory. PREREQ: Declared major in a Natural Science.

GLY 492 Directed Research: Geology (2-6 sem. hrs.) Independent work in field, laboratory, and library on research topic chosen prior to registration. Repeatable to a maximum of 6 semester hours but total semester hours in GLY 392 plus 492 may not exceed 6. PREREQ: 24 semester hours in geology.

GLY 496 Externship: Geology (1-3 semester hours) Off-campus learning at institutions, universities or businesses conducting geologic studies. Course may be repeated for new externship projects; up to 4 semester hours total may be earned in this course. For students majoring or minoring in Geology or Environmental Science. Fall, spring, summer. PREREQ: Six hours of geology courses.

## Health Education HEA

HEA 125 Introduction to Health Education (3,0,3) Health education as a profession and for program implementation in the schools, community, and patient education; philosophies and beliefs regarding health education.

HEA 135 Safety and First Aid $(3,0,3)$ First aid measures for injuries, emergencies, and sudden illness; skill training in all procedures; general safety education; accident causes and remedial action. American Red Cross certification in basic first aid and CPR for students passing the examinations.

HEA 160 Personal Health $(3,0,3)$ Holistic health; development of a healthy and aging personality, emotional health, social health, consumer health, and environmental health using a variety of methods including analysis and synthesis of research; application of these data in the decision making process critical to health lifestyle choices.

HEA 170 Community Health $(3,1,3)$ Understanding components of community health; organization, physical diseases, psychosocial problems, and environmental and special aspects. Fall

HEA 250 Health Education for Elementary Teachers (2,0,2) Content and skills for developing, implementing, and evaluating health education in the P-5 classroom. PREREQ: admission to P-5 program or consent of instructor.

HEA 320 Drug and Alcohol Education (3,0,3) Effects of drug use and abuse on the individual and society. Personal, school and community approaches toward establishing intelligent use of drugs. PREREQ: junior standing.

HEA 350 Sexuality Education $(3,0,3)$ Current issues in sexuality education; psychological, biological, and sociological aspects of sexuality; dealing with controversial areas of sexuality; scope and sequence of sexuality education K-12. PREREQ: junior standing.

HEA 489 Practicum: Health Education $(01,1)$ Supervised practice teaching experience in elementary, middle, and high school setting. Integrated with methods course. COREQ: HEA 525.

HEA 525 Methods and Materials in Health Education (3,0,3) Principles, methods, and techniques for developing, implementing, and evaluating health education in p-12 and other appropriate settings; theoretical foundations, teaching methodology and strategies, curriculum designs, and resource materials. PREREQ (undergraduates): admission to teacher education and 9 semester hours in health education or consent of instructor.

HEA 599 Special Topics in Health Education (1-3 sem. hrs.) Individual or group study of a topic of current interest in health education. Topic selected by student with approval of instructor.

## Health Science BHS

BHS 410 Healthcare Management $(3,0,3)$ Basic applied management functions in the healthcare setting; personnel and patient scheduling; purchasing procedures; budget and quality improvement process; organization relationships and authority. PREREQ: RAD 386 or RSP 486.

BHS 490 Senior Seminar (2,0,2) Discussion of current issues and problems related to health care professions. PREREQ: RAD 396 or RSP 496.

## History <br> HIS

HIS 100 History of Europe to $1713(3,0,3)$ Survey of Europe including Greco Roman civilization, the Middle Ages, the Renaissance, and the emergence of the modern era. A general education course (history or humanities).

HIS 101 History of Europe, 1713 to the Present $(3,0,3)$ Survey of Europe from the Ancient Regime to the present; impact of modern political revolution, the industrial revolution, and social and cultural alterations that have shaped contemporary society. A general education course (history or humanities).

HIS 102 History of the United States through 1877 (3,0,3) The nation's development from the beginning through the Civil War and Reconstruction. Designed to meet demands for a general understanding of U.S. history. A general education course (history or humanities).

HIS 103 History of the United States since $1877(3,0,3)$ Continuation of HIS 102. A general education course (history or humanities).

HIS 106 History of African Americans to 1877 (3,0,3) Major trends of African American history from its 15th century West and Central African heritage to enslavement and ultimate emancipation; conditions and contributions of African American men and women within the American experience. A general education course (history or humanities).

HIS 107 History of African Americans since 1877 (3,0,3) Major trends of African American history from the end of Reconstruction; responses of African Americans to Jim Crow; African American participation in the two world wars, the Vietnam War, and the civil rights movement. A general education course (history or humanities).

HIS 108 World History to $1500(3,0,3)$ Political, social, economic and cultural development of major world societies to the expansion of the western world. A general education course (history or humanities).

HIS 109 World History since 1500 (3,0,3) Political, social, economic and cultural development of major world societies in the modern era. A general education course (history or humanities).

HIS 194H Honors History Seminar (3,0,3) Research methods and materials of the historian; usefulness of historical analysis to students in many disciplines. An alternative to the100 level survey courses for students who have demonstrated outstanding potential in history. A general education course (history or humanities). PREREQ: a composite score of 24 on current ACT or equivalent; or HNR GPA of 3.25 or higher.

HIS 291W Advanced Historical Writing (3,0,3) A course designed to help students develop the necessary expertise and approaches for researching, organizing, writing, revising and editing the styles of writing used most often to communicate in the discipline of history. PREREQ: ENG 101 and 3 semester hours of history. A general education course (written communications II).

HIS 300 The Ancient Near East and Greece to the Macedonian Conquest $(3,0,3)$ Birth of civilization in Egypt and Mesopotamia; ancient near East and Greece to the conquest of Greece by Philip of Macedon.

HIS 301 The Hellenistic World and Rome to the Death of Constantine (3,0,3) Conquests of Alexander the Great; main features of the Hellenistic world and the Roman Empire.

HIS 303 Europe in the Middle Ages (3,0,3) Developments from the 4th through the 15th centuries.

HIS 304 Renaissance Europe (3,0,3) Developments from Petrarch to the Treaty of Westphalia; significant cultural and religious trends.

HIS 305 Reformation Europe (3,0,3) German, English, Swiss, and French reformations; Counter Reformation; religion, politics, and social and intellectual change, 1494-1648.

HIS 308 Modern Europe, 1870-1920 (3,0,3) European society, especially as affected by the growth of nationalism, imperialism, and modern science culminating in the origins and results of World War I.

HIS 309 Modern Europe since 1920 (3,0,3) Economic and political instability in the inter war years; World War II; European renaissance since 1945.

HIS 310 Colonial America to 1763 (3,0,3) Origins and development of the English colonies.

HIS 311 The War for Independence and the Constitution, 1763-1789 (3,0,3) Causes of the break between America and Great Britain; the war for American independence; the confederation period; writing and adopting the Constitution and the Bill of Rights.

HIS 312 Federalist United States, 1789-1828 (3,0,3) Successful consolidation of the U.S. as a modern nation-state.

HIS 313 Expansion and Conflict, 1828-1861 (3,0,3) Territorial, sectional, and cultural growth; nature and expansion of slavery and conflicts such as debate over the extension of slavery that culminated in the U.S. Civil War.

HIS 314 Rise of the Industrial United States, 1865-1900 (3,0,3) Effects of increased industrialization and urbanization on the U.S. economy, government, and post Civil War society.

HIS 315 Modern United States History, 1900-1939 (3,0,3) Major changes that marked the U.S. during the first 40 years of the 20th century.

HIS 316 Modern United States History Since 1939 (3,0,3) Major political and social changes since 1939.

HIS 317 History of the New South $(3,0,3)$ The southern U.S. since 1865; cultural, political, economic, and literary trends; roles of blacks from Reconstruction to present, including the rise of Jim Crowism, legal segregation in the 20th century, desegregation, and civil rights movements in 1950s, 60s, and 70s.

HIS 318 Current Events in a Historical Perspective (3,0,3) Historical background of significant recent events in U.S. history.

HIS 319 Conflicting Historical Viewpoints $(3,0,3)$ Conflicting interpretations of some major historical events and trends of the contemporary world.

HIS 320 The Colonial Experience in the Non-western World (3,0,3) Impact of western colonialism on traditional societies in "Third World."

HIS 321 Modernization in the Non-western World $(3,0,3)$ The "Third World" nations; problems resulting from conflicting dynamics of independence and modernization.

HIS 322 History of Naval Warfare $(3,0,3)$ Development of fighting ships in western culture; interaction between social and technological factors and warfare on the high seas.

HIS 323 United States Military History (3,0,3) U.S. military history from colonial times to the present; operations; interaction between war and society.

HIS 325 Early Latin American History (3,0,3) Origin, growth, and development of Latin America from the pre-Colombian period to the independence revolutions of the early19th century, including analysis of Iberian and non-Iberian tradition.

HIS 326 Modern Latin American History (3,0,3) Political, economic, social, and cultural development of Latin America from independence through the 19th and 20th centuries; analysis of Iberian and non Iberian tradition.

HIS 327 Anglo-American Legal History (3,0,3) Origin and development of the Common Law from Norman beginnings to the present; emphasis on U.S.

HIS 329 History of the Middle East and North Africa (3,0,3) Evolution of southwestern Asia and north Africa since the rise of Islam; 19th and 20th century origins of contemporary problems.

HIS 330 History of China ( $3,0,3$ ) Traditional and modern China; cultural, political, religious and philosophical survey.

HIS 331 History of Japan $(3,0,3)$ Traditional and modern Japan; cultural, political, religious and philosophical survey.

HIS 332 World Civilizations to 1500 (3,0,3) Economic, social, political, and cultural aspects of major western and non-western civilizations prior to the era of western world dominance. PREREQ: A 100-level history course or consent of instructor.

HIS 333 World Civilizations Since $1500(3,0,3)$ The major western and non-western civilizations' economic, social, political and cultural evolution in the modern era. PREREQ: A 100-level history course or consent of instructor.

HIS 335 History of Ancient Africa $(3,0,3)$ Examination of African History from the earliest humans to the transatlantic slave trade. Course stresses the use of interdisciplinary sources to reconstruct African History and counter popular myths about Africa and Africans.

HIS 336 History of Modern Africa $(3,0,3)$ Examination of African History from the transatlantic slave trade to the current era. Course stresses the historical roots of current African conditions via an understanding of the transatlantic slave trade, colonialism, and African cultural, economic and political traditions.

HIS 353 English History to $1485(3,0,3)$ From the Roman invasion to the end of the Middle Ages.

HIS 354 English History from 1485 to 1760 ( $3,0,3$ ) From the founding of the Tudor dynasty to the accession of George III.

HIS 355 English History from 1760 to Present $(3,0,3)$ From the accession of George III to the present.

HIS 362 History of Germany to 1870 (3,0,3) From the Holy Roman Empire to emergence of modern nationalism and the Industrial Revolution.

HIS 363 History of Germany Since $1870(3,0,3)$ Cultural, political, and social developments since founding of the German Empire.

HIS 365 European Military History: Ancient World to the Renaissance (3,0,3) Interaction between warfare and European society from the ancient world to the Renaissance.

HIS 366 European Military History: Renanissance to the Modern World $(3,0,3)$ Interaction between warfare and European society from the Renaissance until the end of World War II.

HIS 377 Modern Russia Since 1855 (3,0,3) Modernization under the last Romanov emperors: bolshevik dictatorship; modern communist state; post-communist developments.

HIS 379 History of Literature $(3,0,3)$ Study of selected literature and its interrelationship with history. Topics vary by instructor; may be repeated for credit when topics vary. PREREQ: 3 hours of history.

HIS 380 History and Film $(3,0,3)$ Film as a reflection and a shaper of history. May be repeated for credit when topics vary.

HIS 381 History and the Arts $(3,0,3)$ Study of a selected art form and its interrelationship with an historical era. Topics vary by instructor, may be repeated for credit when topics vary. PREREQ: 3 hours of history.

HIS 382 History of Kentucky $(3,0,3)$ History of Kentucky from 1750 to the present; political, economic, and social issues; how developments in the Commonwealth related to trends in U.S. history.

HIS 385 Art and Method of History (3,0,3) Survey of major philosophies of history and of the meaning and nature of history; introduction to methods of historical research and writing. Required of all students majoring in history and of all students in the social studies area of concentration; should be taken if possible before other upper division work in history.

HIS 409 The French Revolution $(3,0,3)$ The revolution through the Napoleonic era; its international repercussions and influences on revolutionary movements and political philosophies of modern times.

HIS 410 History of France since 1815 (3,0,3) Major issues in France since the end of the Napoleonic era; includes the industrialization of France, institutional changes, the experience of World War I and World War II, colonization and decolonization, European integration. PREREQ: 3 hours of history.

HIS 413 History of Nazi Germany (3,0,3) Origins, dimensions, and downfall of Hitler's fascist state.

HIS 414 The Holocaust $(3,0,3)$ An exploration of the genocidal European Holocaust during World War II. Includes study of the origin, growth and development of European anti-Semitism and pseudoscientific biological racism as practiced in National Socialist (Nazi) Germany.

HIS 416 Plains Indians (3,0,3) A history of the Sioux, Cheyenne, Comanche, Nez Perce, and Apache, concentrating on the post Civil War era and especially on the fate of these peoples at the hands of white civilization.

HIS 417 Civil War and Reconstruction, 1860-1877 $(3,0,3)$ Causes of the Civil War; the war in the field and on the home front; slavery, emancipation, and the economic, political, and social consequences of reconstruction.

HIS 419 Social and Economic History of the United States to 1865 (3,0,3) Economy of the young nation and its relationship to social classes and changes, including gender issues.

HIS 420 Social and Economic History of the United States Since 1865 (3,0,3) The Industrial Revolution and its social consequences; immigration and mobility; gender issues; other backgrounds to contemporary society.

HIS 421 Cultural and Intellectual History of the United States to 1875 (3,0,3) U.S. life and thought as reflected in Puritanism, in the Enlightenment, in Jacksonian nationalism, and in social and political reform movements in the mid-19th century.

HIS 422 Cultural and Intellectual History of the United States Since 1875 $(3,0,3)$ Exploration of the U.S. mind and character in the last 100 years; influences of Darwinian thought, reformism, urbanization, cultural nationalism, and contemporary social tensions.

HIS 423 Diplomacy and Foreign Policy of the United States (3,0,3) Principles, historical evolution, and particular nuances of U.S. foreign policy.

HIS 424 History of American Diplomacy to $1900(3,0,3)$ This is an advanced level survey of the personalities, events, and policies affecting American foreign policies from colonial times to 1900 . Students will be exposed to readings and research utilizing methodologies in the subject area of American Diplomacy.
HIS 425 History of American Diplomacy Since $1900(3,0,3)$ This is an advanced level survey of the personalities, events, and policies affecting American foreign policies from 1900 to the present. Students will be exposed to readings and research utilizing historical methodologies in the subject area of American Diplomacy.

HIS 426 Historical Geography of the United States $(3,0,3)$ Spread of settlement, growth of urbanization, and development of economic and culture regions; past and present distribution of religious groups, European ethnic groups, and Afri-can-Americans. Same as GEO 309.

HIS 427 Urban History of the United States $(3,0,3)$ Origins and growth of cities; impact of cities upon U.S. development; contemporary urban problems.

HIS 431 Historical Themes in African American History (3,0,3) Experiences undergone by Africans in the diaspora from Africa and subsequent scattering throughout the U.S.; struggles over race and gender within the context of dominant political, economic, social, and cultural institutions; attempts by Blacks to build an enduring community. PREREQ: HIS 102 and HIS 103 or HIS 106 and HIS 107. A general education course (race/gender perspective).

HIS 435 History of Race Relations in the Americas, 1492-c. 1800 (3,0,3) Major influences in the formation of race relations in the Americas (U.S. and Latin America) from the European explorations to the revolutions for independence; role of race in the development of European colonies in the Americas. PREREQ: 3 hours of history or consent of instructor(s).

HIS 436 History of Race Relations in the Americas, c. 1800 to the Present $(3,0,3)$ Major influences in the development of race relations in the Americas (U.S. and Latin America) from the revolutions for independence to the present; role of race in the development of modern nation states in the U.S. and Latin America. PREREQ: 3 hours of history or consent of instructor(s).

HIS 438 African-American Women's History and Culture $(3,0,3)$ This discus-sion-oriented course is a history of African-American women that begins by examining African women and their cultures prior to European contact and ends with a look at women in the civil Rights Movement. This course satisfies AfroAmerican Studies history option.

HIS 442 History Through Biography ( $3,0,3$ ) Examination of various historical eras through study of lives of influential and outstanding individuals from diverse areas. Topics vary. May be repeated once for credit.

HIS 444 History of Women in the United States to $1900(3,0,3)$ Women's role in U.S. economic, social, political, and cultural development until 1900; participation of women in historical eras from earliest societies through industrialization as experienced in diverse ways depending on racial, ethnic, class, and regional differences. PREREQ: HIS 102. A general education course (race/gender perspective).

HIS 445 History of Women in the United States since 1900 ( $3,0,3$ ) Women's role in U. S. economic, social, political, and cultural development since 1900; participation of women in recent history as experienced in diverse ways depending on racial, ethnic, class, and regional differences. PREREQ: HIS 103. A general education course (race/gender perspective).

HIS 449 Topics in Women's World History $(3,0,3)$ Exploring women's history in a global perspective, by looking at the status and contribution of women to world societies and discussing gender identity, class, race, religious and ethnic differences. PREREQ: HIS 108 and HIS 109.

HIS 454 Early American Frontier (3, 0, 3) Westward movement and its effects on national character to 1840; colonial wars, War for Independence, land policy, Indian relations, exploration, fur trade, War of 1812.

HIS 455 Later American Frontier $(3,0,3)$ Westward movement and its effect on national character since 1840; Manifest Destiny, Great Plains, Mormons, mining boom, cattle industry, Civil War, relations with Indians, conservation, end of the frontier.

HIS 465 Nature and Development in Latin American History (3,0,3) Examination of the historical relationship between the natural environment and humans in Latin America from the pre-Columbian period to the present; historical ecology, environmental history, secological degradation, economic/social development and modernization. PREREQ: 3 hours of history or consent of instructor.

HIS 470 History of Flight $(3,0,3)$ The evolution of human flight from its earliest representations in ancient mythologies to its modern achievements; multiple consequences of aviation in an international context. PREREQ: 3 hours of history.

HIS 473 Battles and Behavior I: 1066-1836 $(3,0,3)$ Representative battles from Hastings to the Alamo; reveals the interaction between western civilization and its military conflicts.

HIS 474 Battles and Behavior II: 1854-1984 (3,0,3) Representative battles from the Crimea to Star Wars; reveals the interaction between western civilization and its military conflicts.

HIS 475 The First World War $(3,0,3)$ The military record and the war's impact upon international socioeconomic, political, and cultural change.

HIS 476 The Second World War $(3,0,3)$ Origins and prosecution of the war; military and diplomatic aspects from an international perspective.

HIS 480 History of ARab Israeli Conflict (3,0,3) Political, social, diplomatic, and military aspects of the history of Palestinian/Israeli conflict in the context of the Cold War. PREREQ: 3 hours of history.

HIS 485 History of Terrorism $(3,0,3)$ A global examination of the historical evolution and significance of terrorism. PREREQ: 3 hours of history.

HIS 494 Special Topics in History (1-3,0,1-3) Class in topic not included in regular history curriculum. May be repeated for credit when topics vary.

HIS 496 Practicum: History $(0,0,3)$ Participation in planning, implementation, and administration of civic engagement, public history, or other departmental projects under supervision of faculty. PREREQ: Three hours of history and consent of instructor.

HIS 499 Independent Study: History (0,0,1-3) Individualized study of a special topic under supervision of faculty member. May be repeated for credit when topics vary. PREREQ: a 100-level history course and consent of instructor.

HIS 513 The French Revolution (3,0,3) Political, economic, and cultural background of the French Revolution, emphasizing the changing character of the Revolution as it moved in phases from moderate and middle class to radical and violent.

HIS 515 Introduction to Public History (3,0,3) Exploration of different non-academic career fields open to history and humanities majors; coursework includes reading current scholarship by different public history practitioners and active, experiential, service, and problem based learning projects. PREREQ: HIS 102 and HIS 103 or consent of instructor.

HIS 533 Expansion and Conflict $(3,0,3)$ Conflicts that developed with the physical growth of the U.S. during the period 1828 to 1861 involving Mexico, slavery, and Indians.

HIS 535 Civil War and Reconstruction $(3,0,3)$ Causes of the U.S. Civil War; the war itself; slavery, emancipation, reconstruction; economic, military, and social aspects.

HIS 538 Modern United States History, 1900-1939 (3,0,3) Rise of the U.S. to the status of a major world power; the "Progressive Era" and World War I; the 1920s and the 1930s.

HIS 539 Modern United States History Since 1939 (3,0,3) Social and political developments from 1939 to contemporary society including the civil rights movement.

HIS 541 History of Kentucky (3,0,3) History of Kentucky from 1750 to the present; political, economic, and social issues; how developments in the Commonwealth related to trends in U.S. history.

HIS 543 History of the American Frontier (3,0,3) the westward movement and its effect on national character; expansionism; Indian and land policies; cattle and mining frontiers.

HIS 546 History of the American Family (3,0,3) This discussion-oriented course is a history of the American family from the colonial era to the present. We will examine how and why courtship, marriage, sexuality, divorce, and parent/child relationships have changed over time while paying particular attention to racial, class, and gender differences.

HIS 547 Christian Women's Bodies: A Historical Perspective (3,0,3) This course examines the historical development of Christian thought and representation of women, the body, and nature through a study of church doctrine and scripture, women's writing, feminist scholarship and theology, and artistic representations of women.

HIS 548 Diplomacy and Foreign Policy of the United States (3,0,3) Historical evolution of U.S. foreign policy from the Revolutionary War to the present; growth of the U.S. from a minor state to a global power.

HIS 550 History of Appalachia to $1877(3,0,3)$ History of the Appalachian region from prehistory to 1877; political, economic, and social issues; developments in the region related to trends in U.S. History. PREREQ: 3 hours of history of consent of instructor.

HIS 551 History of Appalachia since 1877 (3,0,3) History of the Appalachian region from 1877 to the present; political, economic, and social issues; developments in the region related to trends in modern U.S. History. PREREQ: 3 hours of history or consent of instructor.

HIS 552 History of the Old South $(3,0,3)$ The southern U.S. to 1865 ; cultural, political economic, and literary trends; African American experience in the South.

HIS 553 History of the New South $(3,0,3)$ The southern U.S. since 1865; cultural, political, economic, and literary trends; roles of blacks from Reconstruction to present, including the rise of Jim Crowism, legal segregation in the 20th century, desegregation, and civil rights movements in the 1950s, 60s, and 70s.

HIS 555 Researching the Local History of Underground Railroad (3,0,3) This course explores the various activities of enslaved African Americans as they attempted to abscond from human bondage by crossing the Ohio River, which legally separated slave states from free states. Special attention will be placed on the abolition movement as well as the development of various African American communities in parts of Cincinnati and northern Kentucky. PREREQ: HIS 102 or HIS 106.

HIS 556 African Americans in U.S. Culture, Education, and Politics (3,0,3) African Americans and their interactions within and their contributions to cultural, educational, and political development of the U.S.

HIS 557 History of the Indians of the United States $(3,0,3)$ Native cultural and historical experiences from the15th to 20th century.

HIS 561 Modernization in the Non-Western World $(3,0,3)$ Rise of self-assertion of Third World nations; political, economic, social, and cultural problems of national development.

HIS 565 The Vietnam War $(3,0,3)$ Roots of Indo-Chinese war in traditional Vietnamese culture as affected by colonialism, nationalism, and Marxism; causes of U. S. military intervention, stalemate, and consequent American political crisis; impact of war on Vietnamese and American societies; debate over lessons of the war.

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HIS 570 The Cold War $(3,0,3)$ International perspective on the causes and evolution of the conflict between the United States and the Soviet Union and their allies; effects on world affairs to the fall of the Berlin Wall and demise of the Soviet Union. PREREQ: 3 hours of 100 -level history courses.

HIS 571 Internet Research in American History (3,0,3) This is a topical survey of American History from a multicultural perspective using the internet.

HIS 589 Anglo-American Legal History (3,0,3) Origin and development of the Common Law from Norman beginnings to the present; emphasis on the U.S.

HIS 592 Directed Research in History ( $0,0,3$ ) Individual research in an area of history under supervision of faculty member. May be repeated once for credit. PREREQ: consent of instructor.

HIS 594 Selected Topics: History (1-3,0,1-3) Lecture class in topic not included in regular history curriculum. May be repeated for credit when topics vary.

HIS 596 Internship: History $(0,0,3)$ Supervised work experience in a community history agency or institution or experiential learning in an aspect of public history under the direction of a faculty member. May be repeated once for credit. PREREQ: consent of instructor.

HIS 599 Independent Study: History (0,0,1-3) Individualized study of a special topic under supervision of faculty member. May be repeated for credit when topics vary. PREREQ: consent of instructor.

## Honors <br> HNR

HNR 101 Honors Seminar: The Role of Intellect in Society (3,0,3) Past and present role of intellect in society; general introduction to the goals of the intellect and the tools needed to attain them; nature of higher learning; function of the university; ends and means of higher education.

HNR 301 Honors Seminar: Humanity and Nature (3,0,3) Readings and discussion on significant issues and ideas in the general area of humanity and nature.

HNR 302 Honors Seminar: Humanity and Society $(3,0,3)$ Readings and discussion on significant issues and ideas in the general area of humanity and society.

HNR 303 Honors Seminar: Humanity and the Imagination (3,0,3) Readings and discussion on significant issues and ideas in the general area of humanity and the imagination.

HNR 304 Honors Seminar: Humanity and the Machine ( $3,0,3$ ) Readings and discussion on significant issues and ideas in the general area of humanity and the machine.

HNR 306 Studies in Diversity $(3,0,3)$ Analysis of society and its multicultural representations in selected areas of study (varies from semester to semester).

HNR 307 Studies in Film $(3,0,3)$ Studies in selected topics in film and its relationship to social issues and other arts.

HNR 308 The World in Transition (3,0,3) Analysis of contemporary trends in cyberspace, business and other social arenas.

HNR 309 World Cities/World Cultures $(3,0,3)$ Exploration and appreciation of selected world-class cities and a variety of cultures; cities and cultures vary from semester to semester; taught in English; may be cross-listed with a foreign-language course.

HNR 394 Seminar: Special Topics Honors $(3,0,3)$ Readings and discussion on significant issues not covered in other honors seminars.

HNR 396 Internship $(3,0,3)$ Selected opportunities for students to serve as teaching assistants, research assistants or as assistants in designated business or community groups.

HNR 491 Senior Honors Thesis (0-3,0,0-3) Independent research; oral and written expression. Repeatable for up to 6 hours.

## Human Services/Mental Health <br> HSR

HSR 100 Orientation to Mental Health/Human Services (3,0,3) The field of human services; observing human service delivery agencies in operation; activities of workers in meeting client needs; values and attitudes of human service workers; roles and responsibilities of human service workers; concept of the generalist, concepts of human behavior and needs, and strategies and programs for meeting human needs. Formerly HSR 115.

HSR 102 Practicum in Human Services I $(0,16,4)$ Practicum experience in a clinical setting introducing students to activities of various agency workers and providing opportunities through supervised interaction with clients to begin developing clinical skills; training in observation, communication, and interaction with clients or patients as preparation for entrance into advanced clinical experience. Formerly HSR 106. PREREQ: consent of instructor. COREQ: HSR 103.

HSR 103 Practicum Seminar I $(2,0,2)$ Seminar to accompany HSR 102; discussion of practicum experience and major clinical issues; reinforcing of developing skills. COREQ: HSR102.

HSR 105 Counseling for Human Service Professions (3,0,3) Skills involved in initiating and conducting an effective counseling relationship; models and theories of helping; establishing the counseling relationship; developing counseling responses; identifying counseling goals; implementing strategies to bring about improvement. Formerly HSR 225.

HSR 110 Activities Therapy $(3,0,3)$ Nature and use of therapeutic activities in a variety of settings; organization, content, and application of activity programs and materials for various age levels in hospitals and agencies; training in use of games, arts and crafts, music, dance, and recreation.

HSR 207 Practicum in Human Services II $(0,16,4)$ Clinical placement in human service agencies to develop skills in observation, interviewing, reports, therapeutic relationships, and case presentation. PREREQ: HSR 102. COREQ: HSR211.

HSR 211 Practicum Seminar II $(2,16,2)$ A seminar to accompany HSR 207 during which practicum experience will be discussed, major clinical issues raised and explored, and interpersonal and intra personal skills developed. PREREQ: HSR 102 COREQ: HSR 207.

HSR 212 Crisis Intervention (3,0,3) Practice oriented approach to understanding and working with individuals and families experiencing immediate crisis; dynamics of the crisis experience; recognizing the crisis situation; interviewing clients in crisis; developing and implementing coping strategies; utilizing resource and support systems; referral.

HSR 216 Group Theories and Practice $(3,0,3)$ Small group dynamics and procedures within the mental health/human services field; experimental and cognitive activities introducing types and models of group work, stages of group development, group dynamics, leadership skills/strategies, interventions, and ethical considerations. PREREQ: HSR 105 or consent of instructor.

HSR 226 Behavior Problems of Children $(3,0,3)$ Children's most common behavioral difficulties and their treatment; major etiological, diagnostic, and treatment factors involved in psychological and physical handicaps; behavioral problems of the preschool elementary school; adolescent years.

HSR 250 Introduction to Therapeutic Recreation $(3,0,3)$ The field of therapeutic recreation; philosophy, history, concepts, trends, and activity adaptation; characteristics of special populations; program design analysis; evaluation of treatment goals and objectives; basic recreational skills and community resources and services available. Formerly HSR 150.

HSR 300 Contemporary Issues in Mental Health (3,0,3) Important current social, ethical, and legal issues and trends in mental health/human services; presentations by speaker shaving particular expertise in various issues. PREREQ: HSR 100, junior standing, or consent of instructor.

HSR 301 Holistic Approach to Mental Health (3,0,3) Exploration of the holistic perspective as applied to mental health; the mind/body system, transpersonal
dimensions, the emerging view of mind, discovering human potentials, practices for promoting positive mental health.

HSR 302 Rehabilitation of the Geriatric Patient $(3,0,3)$ Service stating geriatric patients; impediments blocking continued independent living; use and maintenance of mechanical and prosthetic devices facilitating the rehabilitative process; instruction in making home visits, using effective rehabilitation teaching methods, and activities of daily living. PREREQ: HSR 306 or consent of instructor.

HSR 304 Field Experience in Mental Health I $(2,16,4)$ Advanced supervised work experience in a mental health/human service agency providing direct services to clients and patients; development of skills to prevent mental illness and promote mental health in group/community settings. Sixteen hours per week in the agency plus a two-hour on campus seminar. PREREQ: HSR 207. COREQ: HSR 412.

HSR 305 Assessment and Appraisal in Mental Health (3,0,3) Use and interpretation of assessment and appraisal instruments and procedures in mental health services, e.g., psychological, educational, functional, and environmental. PREREQ: PSY 100 and junior standing.

HSR 306 Introduction to Gerontology $(3,0,3)$ The field of gerontology; eclectic introduction to basic concepts of aging; examination of processes of aging; social aspects of aging; major policies and programs affecting older persons.

HSR 314 Death, Dying, and Grief $(3,0,3)$ Major topics from an interdisciplinary perspective; attitudes and practices; experience of dying and grieving; medical, legal, and ethical issues; children and death; suicide, violence, and mass death; funeral practices; caring for the dying and the survivors; speculation about an afterlife. PREREQ: 6 semester hours in behavioral and/or social sciences.

HSR 321 Mental Health and Aging (3,0,3) Psychological, biological, and social factors affecting mental and emotional functioning in old age; strategies for assessment of and intervention in behavioral disorders; methods to identify and utilize family, community, medical, and long term care support systems. PREREQ: HSR 306 or consent of instructor.

HSR 340 Alcoholism: Issues and Intervention (3,0,3) The field of alcoholism; the acquisition of knowledge, skills, and attitudes required to provide helping services to alcoholics and their families; recognition of the problem; effects, etiology, counseling, treatment, and resources. Designed primarily for alcohol workers in hospitals, industry, rehabilitation, and government and other agencies. Formerly HSR 205.

HSR 351 Survey of Therapeutic Recreation Delivery Systems (3,0,3) Institutions, agencies, and programs providing therapeutic recreation services; health care agency structures and therapeutic recreation designs and programs; functions and effectiveness of therapeutic recreation service delivery. Formerly HSR 252. PREREQ: HSR 250 or consent of instructor.

HSR 352 Therapeutic Recreation: Techniques and Procedures (3,0,3) Concepts and skills required to develop and utilize therapeutic recreation activities in a variety of settings; techniques and methods used in adapting activities for the exceptional individual; screening devices used to detect handicaps; activities with corrective and developmental value; organizing and planning activity programs for particular fields of interest (e.g., cerebral palsy, orthopedic handicap, elderly, and convalescent); basic recreational skills appropriate for children, youth, and adults. PREREQ: HSR 250or consent of instructor.

HSR 404 Field Experience in Mental Health II $(2,16,4)$ Advanced supervised work experience in a mental health/human services agency providing direct services to clients and patients; program development, management, and evaluation responsibilities and activities. Placements are arranged in settings meeting the student's particular interests and needs. Sixteen hours per week in the agency plus a two-hour on campus seminar. PREREQ: HSR 304 or consent of instructor. COREQ: HSR 430.

HSR 410 Psychosocial Forces in Late Life (3,0,3) Analysis of theory and research on psycho social aspects of aging; age stratification and patterns of interaction among cohorts; influences of family on individual life cycle; implications of retirement demographics after 60; impact of major institutions on older adults. PREREQ: HSR 306 or consent of instructor.

HSR 412 Leadership Skills for Small Groups $(3,0,3)$ Theory and application of leadership skills in Small group situations in organizational and mental health settings. Restricted to students majoring in mental health/human services. PREREQ: HSR 216, junior standing, or consent of instructor. COREQ: HSR 304.

HSR 416 Mental Health Counseling: Principles and Practice (3,0,3) Advanced principles and application of counseling strategies utilized to help individuals improve their mental health functioning. Course assumes student has acquired understanding and skills of basic counseling. PREREQ: HSR 105 or PSY 341.

HSR 430 Human Services Administration (3,0,3) Skills and knowledge involved in effective development and administration of small mental health/human services programs or agencies: organizing, setting goals, and estimating needs, recruiting, selecting, orienting, supervising, and evaluating employees; securing and managing financial resources; evaluating program and majoring in mental health/human services. PREREQ: PAD 300 or consent of instructor. COREQ: HSR 404.

HSR 450 Alcoholism and the Dysfunctional Family $(3,0,3)$ Alcoholism and the family system; needs, problems, dynamics; services and resources available; principles and strategies of family therapy; primary prevention. Formerly HSR 350. PREREQ: HSR 340 or consent of instructor.

HSR 494 Topics: Mental Health $(3,0,3)$ A selected topics or issue of importance in mental health. Offered according to demand and interest of students. Maybe repeated for credit when topics vary.

HSR 499 Independent Study (1-4 sem. hrs.) Directed readings, independent research, or other areas of specific or individual academic interest. Not intended to substitute for any course offered on a regular basis. Written agreement between faculty member and student must be submitted to department chair within first two weeks of semester; elements of agreement to include purpose, objective, instructional activities, time frame, and evaluation procedure. PREREQ: junior standing and consent of instructor.

HSR 500 Multicultural Family Work: Principles and Practices (3,0,3) Best practices of in service delivery to families of young children at risk; importance of parent worker partnerships and shared decision making in assessment, communication/intervention, and evaluation; participation in collaborative supervised assessment of one family; family centered services plan. PREREQ: HSR 105 or EDU 570, or equivalent.

HSR 502 Positive Guidance Strategies for Early Childhood Practitioners $(3,0,3)$ Positive strategies for effectively handling many behavioral concerns that arise while working with young children with and without disabilities; observation and supervised participation in child development settings. PREREQ: EDU 300 or PSY 220, or equivalent.

## Human Resource Management <br> HRM

HRM 300 Introduction to Labor Relations (3,0,3) Development, structure, and process of American labor relations; evolution and origins of labor unions, internal and external responses to their environment, major legislative and judicial decisions affecting labor management relations, and the collective bargaining process; current and anticipated developments. PREREQ: junior standing.

HRM 301 Training and Employee Development $(3,0,3)$ This course will provide students the opportunity to develop essential knowledge and skills involved in the effective training and development of employees. This course will address the roles of organizational trainers and managers in employee training and development. PREREQ: MGT 340.

HRM 302 Recruiting and Selecting Human Resources $(3,0,3)$ Provides students in-depth knowledge of the human resources planning, recruitment, and selection activities performed in organizations. Exposure to the variety of recruiting sources and hiring techniques managers use to staff the organization will be stressed. The focus will be on developing within the student the ability to design recruitment and selection programs that support the organization's short-and long-term strategies. PREREQ: MGT 340.

HRM 303 Employment Law (3,0,3) Legal and administrative framework for labor management relations; role of the courts; the NLRB and other administrative agencies, decisions, and procedures. PREREQ: MGT 340.

HRM 304 Compensation and Benefits (3,0,3) Economic impact of wages and benefits on the labor management process; estimating the cost of the labor contract, benefits law, and effects of wages and benefits on the economy. PREREQ: MGT 340.

HRM 394 Special Topics in Human Resource Management (3,0,3) Specialized topics of student and business community interest. Topics for current offering listed in on-line Schedule of Classes. May be repeated up to three times for elective credit when topics differ. PREREQ: MGT 340.

HRM 396 Internship: Human Resource Management (3,0,3) Application of theoretical knowledge in solving business problems through consulting and counseling with business owners; group work in case analysis and problem solving. PREREQ: MGT 340.

HRM 480 Strategic Human Resources $(3,0,3)$ This course will provide students the opportunity to learn essential knowledge and skills involved in making the Human Resource function a strategic partner in organization. Emphasis will be placed on aligning HRM activities with organization's values and mission and using HRM activities to build the organizational capability and competitive advantage. Open only to students certified as Human Resource Management majors. PREREQ: HRM 301, HRM 302, MGT 340, LAS 304 and senior standing.

## Informatics <br> INF

INF 101 Computer Literacy and Informatics (3,0,3) Understanding the basic concepts of informatics in a context including computer technology; examination of hardware and software; impact computers have on society including employment, privacy, ethics, and security; working with information as a resource. The course includes computer laboratory exercise in Office (Word, Excel, PowerPoint, Access) and Internet technology applications.

INF 101H Honors Computer Literacy and Informatics (3,0,3) Application of computer hardware, software, and computing techniques to common business problems and activities; microcomputers and business productivity packages including word processors, spreadsheets, databases, and other systems and applications software; extensive hands- on work in a graphical user environment.

INF 110 Business Programming $(3,0,3)$ Strategies, techniques, and tools for professional programming in a business environment; problem definition, software design, program design, and system implementation; development of systems of programs to implement common business applications.

INF 120 Elementary Programming (3,0,3) An elementary introduction to programming for those with no previous programming experience. Emphasis on understanding how to read and write basic procedural programs, and on understanding the concepts of algorithm and execution. PREREQ: $C$ or better in MAH 099 or placement.

INF 186 Elementary Web Design (3,0,3) An introduction to web design and development for majors outside the informatics fields. Web page creation and HTML; site organization and best practices; introduction to cascading style sheets. No credit after INF 286.

INF 194 Topics: Informatics $(3,0,3)$ Various topics in Informatics. PREREQ: varies with topic (see Schedule of Classes).

INF 260 Object-Oriented Programming I (3,0,3) Elementary object-oriented programming concepts and practice:; types, decisions, loops, methods, arrays, classes; design and problem-solving. An intensive introduction intended for students with programming experience. PREREQ: C or better in MAT 109 (or higher), and INF 110 or INF 120 or placement.

INF 260L Object-Oriented Programming Laboratory (0,1.5,1) Laboratory to accompany INF 260 in which students gain hands-on experience in programming and using programming tools such as debuggers. COREQ: INF 260.

INF 282 Introduction to Databases $(3,0,3)$ Core concepts for the design, creation, and manipulation of relational databases. Analysis of data requirements, conceptual modeling, definition of the relational model, relational database design and normalization, and database implementation; manipulation of relational databases using relational algebra with SQL. PREREQ: C or better in MAT 109 (or higher).

INF 284 Intro to Networks and Data Communication (3,0,3) Introduction to computer networking; data communications; data transmission, data encoding, data link control; communications network techniques; network protocols; wireless networking; network server configuration; and planning and deploying a local area network. Open only to students certified as majoring in business or with consent of instructor. PREREQ: C or better in MAT 109 (or higher) and INF 110, INF 120 or CIT 140.

INF 286 Introduction to Web Development $(3,0,3)$ An introduction to web design and development for majors in the informatics fields. Web page creation and HTML; site organization and best practices; e-business planning, models and strategies; overview of SML and CSS; introduction to client-side and server-side programming. PREREQ: C or better in MAT 109 (or higher) and INF 110 or INF 120.

INF 294 Topics: Informatics $(3,0,3)$ Various topics in Informatics. PREREQ: varies with topic (see Schedule of Classes).

INF 345 Wireless Commerce Technology (3,0,3) This class covers content such as the basics of wireless technology, standards, and devices, and the development of environments for creating mobile and wireless applications. The class will also discuss the opportunities for wireless technology in business and consumer services, advanced messaging (SMS and IM), wireless CRM, security and privacy issues, and business models. PREREQ: Junior standing or approval of instructor.

INF 394 Intermediate Topics: Informatics $(3,0,3)$ Various topics in Informatics. PREREQ: varies with topic (see Schedule of Classes).

INF 444 Social Informatics $(3,0,3)$ Examination of the roles of individuals, organizations, and governments relative to changes brought by new communication and computer technologies to the home, workplace and society. Topics include free speech, privacy, intellectual property, sovereignty, globalization, and technology and the individual. These topics are examined from multiple theoretical perspectives.

## Integrative Studies <br> IST

IST 492 Directed Research $(0,0,3)$ Students undertaking this course will select a research topic and produce an extensive essay or project based on primary and/ or secondary sources. Selected topics might include: an issue, theme, problem, region, time period, institution, figure, work, ideas, or practices. The topic should be narrow enough to enable the student to uncover all relevant disciplinary perspectives and ensure that these perspectives are contrasted. PREREQ: Consent of instructor.

IST 494 Seminar: Advanced Topics in Integrative Studies (3,0,3) This is an advanced interdisciplinary study of a specific topic or issue. May be repeated for credit when subjects differ. PREREQ: varies with topics. See Schedule of Classes.

IST 496 Internship $(0,0,3)$ This supervised work experience in a community agency, an institution or experimental learning under the direction of a faculty member provides students the opportunity to integrate cognitive learning with practical experiences. May be repeated once for credit. PRERRQ: consent of instructor.

IST 499 Independent Study; Directed Readings $(0,0,3)$ Individualized study of a selected topic under the supervision of a faculty member. May be repeated for credit when topics vary. PREREQ: Consent of instructor.

## International Programs <br> INTL

INTL 300 International Service Learning Experience (1-3,0,1-3) Volunteer community service work outside the United States as part of an NKU team.

Includes preparatory seminars and follow-up meetings. PREREQ: ENG 101, consent of instructor, and student must apply to the Office of International Programs. May be repeated twice. Graded Pass/Fail.

## Italian <br> ITA

ITA 101 Elementary Italian I $(3,1,4)$ Introduction to grammar, pronunciation, and vocabulary; practice in speaking. A general education course (humanities).

ITA 102 Elementary Italian II $(3,1,4)$ Continuation of ITA 101, additional grammar study, pronunciation drill, and new vocabulary; further practice in speaking and reading. A general education course (humanities). PREREQ: ITA 101 or equivalent.

ITA 201 Intermediate Italian I $(3,0,3)$ Review and extension of basic language skills acquired in ITA 101 and 102; reading and discussion of cultural and literary subjects. A general education course (humanities). PREREQ: ITA 102 or equivalent.

ITA 202 Intermediate Italian II $(3,0,3)$ Continuation of grammar review and enhancement of language skills begun in ITA 201; reading and discussion of cultural and literary subjects. A general education course (humanities). PREREQ: ITA 201 or equivalent.

## Japanese <br> JPN

JPN 101 Elementary Japanese I $(3,1,4)$ Oral-aural approach to Japanese language, pronunciation, vocabulary, grammar; kana syllabary writing system. A general education course (humanities or non-western).

JPN 102 Elementary Japanese II $(3,1,4)$ Continuation of JPN 101. Further command of grammar and expansion of vocabulary in conversational Japanese; introduction of additional Chinese characters for reading comprehension and writing. A general education course (humanities or non-western). PREREQ: JPN 101 or equivalent.

JPN 180 Elementary Individualized Instruction in Japanese (1,0,1) Individual work for students desiring additional instruction in grammar, pronunciation, vocabulary and cultural topics. May be repeated once for credit. PREREQ: JPN 101 or equivalent and consent of instructor.

JPN 201 Intermediate Japanese I $(3,0,3)$ Review of pronunciation, vocabulary, grammar and syllabary writing system introduced in JPN 101-102; introduction of advanced structural patterns and cultural influences of the language. A general education course (humanities or non-western). PREREQ: JPN 102 or equivalent.

JPN 202 Intermediate Japanese II (3,0,3) Continuation of JPN 201; additional practice in language structural patterns and cultural influences. A general education course (humanities or non-western). PREREQ: JPN 201 or equivalent.

JPN 280 Intermediate Individualized Instruction in Japanese (1,0,1) Individual work for students desiring additional instruction in grammar, pronunciation, vocabulary and cultural topics. May be repeated once for credit. PREREQ: JPN 201 or equivalent and consent of instructor.

JPN 350 Methods of Teaching Japanese $(3,0,3)$ Theoretical and practical considerations of teaching Japanese in American schools; required of all students seeking teaching certification in Japanese. PREREQ: JPN 202 or equivalent.

JPN 380 Topics in Advanced Japanese (3,0,3) Advanced study of Japanese language, literature, and culture. May be repeated for credit. PREREQ: JPN 202 or consent of instructor.

JPN 520 Readings in Japanese ( $3,0,3$ ) Various literary, linguistic, cultural, and pedagogical topics. May be repeated for credit when topic varies. PREREQ: JPN 380 or equivalent.

## Journalism <br> JOU

JOU 100 Media Literacy $(3,0,3)$ Fundamental concepts of mediated communication; analysis of roles, functions, and influence of media on individuals and society. Same as EMB 100. A general education course (Social Sciences).

JOU 110 Introduction to Mass Media (3,0,3) Examination of the structure and operation of mass media and related industries, including journalism, broadcasting, Internet, public relations, advertising, entertainment, within a framework of historical, social and legal forces that have helped shape mass media; emphasis on career perspectives in media. Same as EMB 110.

JOU 120 Etymology (3,0,3) Origins, background, and fundamental value of words as a communication medium.

JOU 220 Newswriting I $(3,0,3)$ Introduction to fundamental reporting methods, various styles of newswriting, the vocabulary of the profession, the role of the journalist in society, and the workings of newspapers, both dailies and weeklies. PREREQ: ACT English score of 20 or higher and ENG 101 or consent of instructor.

JOU 230 Newswriting II $(3,0,3)$ Application of fundamental reporting and writing techniques to a variety of complex journalistic story forms: news stories and features, press releases, and radio and TV news. PREREQ: JOU 130.

JOU 262 Audiovisual Production $(2,4,3)$ Techniques for producing sound and visual informational programs; concept development, scripting, story boarding, and production using cameras, recorders, projectors, and other production equipment. PREREQ: JOU/RTV 100.

JOU 265 Broadcast News Writing ( $3,0,3$ ) Principles and practices of writing and editing news for the electronic media; development of an effective broadcasting style, conciseness, and accuracy for hard news and features; basic reporting and interviewing techniques, electronic news gathering, rewriting, editing, and compiling. PREREQ: JOU/EMB 100 and JOU 220.

JOU 296 Practicum: Journalism (0,4-12,1-3) Academically supervised and evaluated on the job experience working on campus for student media. A maximum of 6 semester hours of communication practicum is applicable toward the major in journalism. PREREQ: JOU 130.

JOU 297 Advanced Practicum: Journalism (1-2 variable) Academically supervised and evaluated on-the-job experience working on campus for student media. A maximum of 5 hours of Advanced Practicum may be taken. PREREQ: JOU 296.

JOU 321 Publication Skills $(2,4,4)$ Introduction to and application of publication design and production skills for journalists and journalism related professionals; desktop publishing and other aspects of computer based systems related to fundamental word processing, typography, graphics, page makeup, and publication production. PREREQ: JOU/EMB 100.

JOU 325 Photojournalism $(3,0,3)$ Photo communication and photojournalism as practiced by newspaper and magazines; use of the camera as a tool of modern journalism. PREREQ: JOU/EMB 100.

JOU 330 Public Affairs Reporting (2,2,3) In-depth reporting of government activities, community issues and events, and specialized topics, e.g., business and medicine. PREREQ: JOU 130.

JOU 331 Advanced Reporting: Specialties $(3,0,3)$ Reporting for special interests and/or about specially focused subject matters in both hard news and personal column formats. PREREQ: JOU 130.

JOU 332 Advanced Reporting: Precision Journalism (3,0,3) Trends in and methods of incorporating statistical and social science research techniques into reporting practices. PREREQ: JOU 230.

JOU 335 Women in Mass Media (3,0,3) Women and their roles as professional communicators, past and present, in the various media; newspapers, magazines, radio/TV/film, and advertising.

JOU 340 Feature Writing (2,2,3) Freelance and staff writing for magazines, house organs, and other publications. PREREQ: ENG 101 and JOU 230.

JOU 346 Copy Editing $(2,2,4)$ Instruction and practice in newspaper and magazine copy desk work; editing, rewriting, and page makeup and layout. PREREQ: JOU 321.

## 210 Northern Kentucky University

JOU 360 Interviewing $(3,0,3)$ Theory and principles related to a variety of interviewing settings: employment, information, and advising; role of interviewer and interviewee; use of role playing; outside class exercises such as real interviews and written reports. Same as RTV 365and CMST 360.

JOU 370 Principles of Advertising ( $2,2,3$ ) Processes and practices of advertising, conception, organization, market research, copy writing, ad layout and production, media selection and scheduling, and assessment of impact. PREREQ: JOU/ EMB 100.

JOU 371 Advertising Copy Writing $(2,2,3)$ Principles and practice in writing effective advertising copy in printed media and broadcast. PREREQ: JOU 370.

JOU 374 Digital Age Advertising Problems and Policies (3,0,3) Trends and issues in advertising across media; emphasis on study of advertising campaigns. PREREQ: Junior standing or consent of instructor.

JOU 385 Law of Mass Communication (3,0,3) Basic legal concepts and issues affecting mass communication; constitutional law, the First Amendment, libel, slander, invasion of privacy, copyright, the FCC and its regulation of broadcasting, legal access to the media, and the use of classified information by the media. PREREQ: JOU/EMB 100 or junior standing.

JOU 394 Special Topics in Journalism (3,0,3) Focused study of a significant topic from a journalism or mass media perspective. Topics vary semester to semester. May be repeated once for credit.

JOU 396 Internship: Journalism (0,1-5,3) Selected placement, for students declared as majoring or minoring in journalism, in off campus newspapers, public relations/advertising agencies, or other employers of communication professionals. Assigned work may include reporting, writing, editing, production, promotion, and communication management for commercial or noncommercial organization. Repeatable once, for full credit, if second placement involves a different organization and/or duties than the first. PREREQ: 1 semester hour of Journalism practicum (JOU 296).

JOU 421 History of Mass Communication (3,0,3) Social, political, economic, and technological history of U.S. mass media from colonial times to the present; research methods and use of primary sources in historical research.

JOU 425 Communication Symposium (3,0,3) Interdisciplinary issue or problem in mass communications. Focus on different problems or issues each time course is offered. Repeatable once for full credit. PREREQ: JOU/EMB 100 or junior standing.

JOU 430 Communication Theories $(3,0,3)$ Theories of interpersonal, group, public, and mass communication; historical developments, paradigms, and research that shape communication theory construction. Same as RTV 430 and CMST 430. PREREQ: at least junior standing.

JOU 440 Ethics and Media $(3,0,3)$ Evaluation of social and ethical issues relating to mass media; class emphasis on discussion rather than lecture. PREREQ: JOU/ EMB 100 or junior standing.

JOU 480 Reviewing $(3,0,3)$ Essentials of the research, backgrounds, and sources for criticism of performance events, including theatre, films, television, and dance. Student will write numerous critiques of performance events within the community. Same as TAR 480.

JOU 492 Mass Communication Research Methods $(3,0,3)$ Methods of conducting, interpreting, and reporting research relating to mass communications, mass media, public relations, and advertising. PREREQ: JOU 230 or CMST 220.

JOU 499 Independent Study (1-3 sem. hrs.) Individually supervised work involving reading, research, and/or production in a specified area of interest. Topic selected before registration in conference with instructor. May be repeated for a maximum of 6 semester hours. PREREQ: junior standing; a GPA of at least 2.50 or consent of instructor; approved independent study proposal.

JOU 510 Advising High School Publications $(3,0,3)$ Acquainting high school publication advisers with all facets of producing a school newspaper; teaching of newswriting, feature writing, copy editing, makeup, typography, and the art of
motivating student participation; legal responsibilities of the adviser and the student journalist.

## Criminal Justice <br> JUS

JUS 101 Introduction to Criminal Justice ( $3,0,3$ ) Overview of the criminal justice system; organization and operation of police, courts, and corrections; race, ethnicity, gender, and criminal justice decision making; current trends and future prospects. A general education course (social sciences).

JUS 101H Honors Introduction to Criminal Justice (3,0,3) Overview of the criminal justice system; organization and operation of police, courts, and corrections; race, ethnicity, gender, and criminal justice decision making; current trends and future prospects. A general education course (social sciences).

JUS 200 Police in America (3,0,3) Philosophy and history of law enforcement; crime and police problems; organization and jurisdiction of local, state, and federal law enforcement agencies; professional career opportunities and qualifications.

JUS 201 Corrections in America (3,0,3) An interdisciplinary examination of all areas of corrections in the United States informed by law, psychology, sociology, and public policy. Topics explored include history and philosophy of punishment, prisons and jails, institution programming, management of various offender populations, incarceration trends, intermediate sanctions, and parole.

JUS 203 The Criminal Court System (3,0,3) Analysis of the American courts; structure, functions, and roles of incumbents in the courts; emphasis on political and economic contexts within which the court works. Includes survey of research on American legal system. PREREQ: 101.

JUS 204 Criminal Investigation (3,0,3) Kinds, degrees, and admissibility of evidence; collection and handling of evidence; introduction to forensics and criminalistics; application of investigative techniques to specific offenses; types of investigations such as wire tapping, undercover, and sting operations; current trends and future prospects.

JUS 205 Criminal Evidence (3,0,3) Description and analysis of various evidentiary rules that impact on police investigations and case presentations including admissibility and weight of evidence, hearsay, privileged communications, presumptions and proof, eyewitness identification, opinion and expert testimony, evidence unconstitutionally obtained. PREREQ: JUS 101.

JUS 210 Legal Research $(3,0,3)$ Methods of research in establishing authoritative legal opinion and the processing of legal activities.

JUS 215 Private Sector Security $(3,0,3)$ Overview of the American private police system; historical development, trends in private security; organizational structure; career opportunities, and philosophical differences between security and policing. PREREQ: JUS 101.

JUS 220 Liability and Ethics in Criminal Justice (3,0,3) Civil and criminal liability of criminal justice personnel; current trends in litigation; alternatives to litigation; lawsuit prevention; moral foundations of administration of justice in the ethos of a republic; conflicts and dilemmas revolving around accountability, authority, and power. PREREQ: JUS 101.

JUS 231 Race, Gender, and Crime (3,0,3) Political formulation of race and gender; race and gender issues related to criminality, victimization, prosecution; adjudication, sanctions, and employment within the legal system; antecedents of contemporary practice; prospects for change. A general education course (race/ gender perspective).

JUS 294 Special Topics $(3,0,3)$ Intensive study of a specific or special issue in law enforcement or criminal justice conducted in a seminar fashion or through independent study. Topics vary as new issues arise. PREREQ: JUS 101.

JUS 302 Criminal Law (3,0,3) Major crimes; classification, elements of proof, intent, conspiracy, responsibility, parties, and defenses; common law and adaptations. PREREQ: JUS 101 or 203.

JUS 303 Criminal Procedure $(3,0,3)$ Leading constitutional cases on criminal justice; Fourth, Fifth, and Sixth amendments to the Federal Constitution; nature and application of the Bill of Rights to the states; search and seizure, confessions and admissions, and right to counsel and speedy trial. PREREQ: JUS 101 or 203.

JUS 310 Police Management $(3,0,3)$ Organization and administration as applied to operational services, patrol, criminal investigation intelligence and vice units, juvenile units, and traffic administration. PREREQ: JUS 101 or JUS 200.

JUS 311 Police in the Community $(3,0,3)$ Collaboration between police and community to identify and solve community crime problems; strategies and procedures to incorporate community opinion into policing and management; methods of increasing community responsibility in law enforcement. PREREQ: JUS101 or JUS 200.

JUS 312 Institutional Corrections (3,0,3) Legal requirements, management issues, and proper procedures in administering correctional operations in the U.S. PREREQ: JUS 101 or 201.

JUS 313 Rights of the Convicted $(3,0,3)$ Overview of the American correctional system; law of sentencing; corrections; constitutional rights of prisoners; laws, cases, significant changes in judicial policy toward prison litigation; legislative trends toward curtailment of prisoner's rights and benefits. PREREQ: JUS101 or 201.

JUS 315 Criminal Justice Research Methods (3,0,3) Application of basic research methodologies for criminal justice. Topics include research design, sampling, validity, reliability, experimental designs, with a primary emphasis on survey and evaluation research techniques. PREREQ: JUS 101.

JUS 317 Perspectives on Crime $(3,0,3)$ A multidisciplinary approach to understanding the theories, issues and traditions underlying criminal justice and criminal behavior, biological, psychological, economic, and sociological theories of crime; crime measurement. PREREQ: JUS 101 or PSC 100.

JUS 318 The African American, the Law and the Courts (3,0,3) Course provides an analysis of the legal development and status of African Americans from slavery to citizenship as enumerated by the U.S. Constitution and interpreted by the U.S. Supreme Court. PREREQ: JUS 302 or PSC 100.

JUS 319 Criminal Justice in Film $(3,0,3)$ The media play important roles in shaping public perceptions of criminals and criminal justice professionals as well as public attitudes towards crime, violence, and "appropriate" methods of social control. This course is intended to enhance awareness and understanding of accurate and inaccurate filmic depictions of criminal justice. PREREQ: JUS 101.

JUS 320 Advanced Crime Scene Technology and Criminalistics (3,0,3) Advanced criminal investigation techniques focusing on criminal profiling, DNA, forensic aspects of firearms examination, arson and explosives, illicit drugs and toxicology. Investigating violent deaths, sexual crimes and ritualistic crimes including autopsy/coroner investigations. Bloodstain pattern interpretation, forensic pathology and forensic psychology will also be addressed. PREREQ: JUS 204.

JUS 321 Black Women, Crime and Politics $(3,0,3)$ Examines the role of women of African descent in America, their history from slavery to the present and their impact on crime and politics. Discussion about the role of women of African descent in Africa prior to slavery in America and their social, political, and legal history toward citizenship. PREREQ: JUS 101.

JUS 333 Careers in Criminal Justice $(3,0,3)$ Overview of various career options and career planning in criminal justice. PREREQ: JUS 101.

JUS 339 Applied Corrections $(3,0,3)$ This course is designed to provide the students with experience in providing correctional options for offenders. Specific topics will include: the assessment of offenders, what works and what doesn't in reducing recidivism among offenders, and examining substance abusing offenders in a correctional context. PREREQ: JUS 101.

JUS 351 Financial Investigations (3,0,3) An examination of the history, scope, and method of control of organized and white collar crime. Cultural and social implications are explored. PREREQ: JUS 101.

JUS 400 Juvenile Justice $(3,0,3)$ Structure and format of the juvenile justice system; police, courts, and corrections; analysis and description of the organizational structure of each of the subsystems of the justice process; introduction to juvenile justice research findings. PREREQ: JUS 101.

JUS 401 Correctional Rehabilitation (3,0,3) An overview of correctional counseling strategies and techniques; theoretical frameworks; diagnostic and classification schemes; principles of confidentiality; characteristics of program effectiveness. PREREQ: JUS 101 or 201.

JUS 402 Alternatives to Incarceration (3,0,3) A multidisciplinary approach to studying alternatives to incarceration. The history of probation, parole, and the emergence of intermediate sanctions are explored. Topics include boot camps, electronic monitoring, drug courts, halfway houses, intensive supervision. Finally, empirical research evaluating the effectiveness of these alternatives will be discussed. PREREQ: JUS 101 or 201.

JUS 403 Crime and Public Policy $(3,0,3)$ Crime as a political issue; political ideology and response to crime; lawbreaking as political protest and political violence; political trials; legislation of morality. PREREQ: JUS 101 or PSC 100.

JUS 404 Evidence Preparation and Courtroom Testimony (3,0,3) Criminal justice professional's role in collection, analysis, and preparation of evidence for criminal trials and hearings; establishing witness credibility in hearings, trials, depositions; knowledge of federal and state laws, and court decisions governing expert witness status; presenting evidence and testimony at criminal hearings. PREREQ: JUS 101, JUS 204 or 205.

JUS 409 Alternative Dispute Resolution $(3,0,3)$ Victim/offender mediation and related strategies; principles of restorative justice including restitution, reconciliation, and empowerment; negotiation techniques and mediator styles; history and organization of mediation programs. PREREQ: JUS 101.

JUS 428 Crime Across the Life Course $(3,0,3)$ The life course paradigm includes examination of sociology, psychology, and behavioral genetics to investigate the initiation, escalation, duration, and termination of the criminal career. The importance of genetics and biology, abuse in infancy and childhood, the role of parents and peers in adolescence, and the causes of de-escalation will be discussed in examining the offending trajectory and turning points of criminals. PREREQ: JUS 101.

JUS 429 Violence Against Women (3,0,3) This course is designed to inform you about the workings of the criminal court system in relation to violence perpetrated on women. The course will critically analyze the goals of the system, how the participants contribute to those goals and the effectiveness of the system in preventing violence. PREREQ: JUS 101.

JUS 494 Special Topics: Justice Studies (3,0,3) Intensive study of a specific topic or issue in criminal justice. Topics vary as new issues arise. May be repeated when topics vary. PREREQ: JUS 101.

JUS 496 Internship: Justice Studies (1-15 sem. hrs.) Supervised field-work in one of four areas: (1) law enforcement, (2) courts and law, (3) corrections, or (4) support services. Offered on a pass/fail basis. PREREQ: JUS 101; 3 additional semester hours of justice studies coursework; and consent of intern coordinator.

JUS 499 Readings: Justice Studies (1-3 sem hrs) Specialized reading or primary research interests completed through independent study at the direction of a specific instructor. May be repeated as projects vary. PREREQ: JUS 101; 3 additional semester hours of justice studies coursework. A maximum of six hours can be used towards the major or minor in criminal justice.

## Learning Assistance Programs LAP

LAP 090 Academic Assistance $(1,0,1)$ Supplementary instruction paired with selected general education and developmental courses. May be repeated for credit when paired with different courses. Offered on a pass/fail basis. Not applicable toward graduation.

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LAP 091 Reading Workshop $(3,0,3)$ Practice and instruction in reading and reading appreciation; literate behaviors: book selection; reading strategies, processes, comprehension; critical and creative response to materials read. Not applicable toward graduation.

LAP 110 Critical Reading ( $3,0,3$ ) Development of critical reading strategies (including analysis, synthesis, an devaluation); cultural literacy; contemporary themes through readings from the natural sciences, sociology, anthropology, psychology, literature, and the arts. Provides preparation for general education courses in a variety of disciplines.

LAP 120 Evaluating Sources (3,0,3) Instruction in information literacy and research techniques; analyzing research questions and information needs, gathering and critically evaluating source materials, and effective selection of sources; editorial and discipline related perspectives, objectivity, credibility, and bias in source materials. Provides preparation for all courses requiring library research.

LAP 201 Tutoring in Learning Assistance Center (1,0,1) Administering and interpreting reading and writing tests; methods of teaching writing, reading, and study skills. Students receive hands on experience in Learning Assistance Center. Designed for prospective teachers and students interested in peer tutoring at NKU. Recommended for students who work as tutors in Learning Assistance Program.

LAP 210 Bookscapes $(3,0,3)$ Introduction to the world of contemporary tradebooks, fiction and non-fiction. Students read tradebooks and learn how to engage with in-depth discussions of these books in an egalitarian, book-discus-sion-club atmosphere.

## Industrial and Labor Relations LAS

LAS 301 Labor-Management Negotiations $(3,0,3)$ Practice and theory of collective bargaining and negotiations in the U.S. private sector. Students will be expected to participate in simulated negotiations. PREREQ: LAS 300.

LAS 302 Contract Administration and Dispute Settlement (3,0,3) Day-to-day administration of a labor agreement; legal framework, the grievance procedure, role of arbitration; informal dispute resolution; labor management, cooperative efforts. PREREQ: LAS 300.

LAS 320 Problems in Labor Law $(3,0,3)$ New developments in labor law, protective labor legislation (Fair Standards Act, Occupational Safety and Health Act, Workmen's Compensation, the Equal Opportunity Employment Act), and current judicial and administrative interpretations of existing legislation. PREREQ: LAS 300 and LAS 303.

LAS 394 Topics: Labor Relations $(3,0,3)$ Study of as elected contemporary area in labor relations. Possible topics might include, but are not limited to: theories of the labor movement, manpower management, ethical principles, and role of supervision. PREREQ: LAS 300.

LAS 396 Practicum: Industrial \& Labor Relations $(3,0,3)$ A work-study program to provide students with an opportunity to observe and participate in an area of labor relations to gain a realistic appreciation for the orientation, procedures, and problems encountered by management, labor, and government in the conduct of industrial relations. Includes are search paper drawn from field work experience. PREREQ: LAS 300, LAS 301, and LAS 302 and junior standing.

LAS 490 Labor Relations Capstone (3,0,3) Conflict resolution, consideration of case literature on collective bargaining and relation of this literature to experiences observed at actual arbitrations and negotiations. PREREQ: Open only to students certifying a major in business; senior standing and LAS 300, LAS 303, LAS 304.

## Latin <br> LAT

LAT 101 Elementary Latin I $(3,0,3)$ Introduction to language and culture of ancient Rome designed for beginning students. A general education course (humanities).

LAT 102 Elementary Latin II $(3,0,3)$ Continuation of LAT 101. A general education course (humanities). PREREQ: LAT 101 or equivalent.

LAT 201 Intermediate Latin I $(3,0,3)$ Review of grammar and vocabulary in LAT 101-102; introduction of advanced constructions in context of readings and cultural study. A general education course (humanities). PREREQ: LAT 102 or equivalent.

LAT 202 Intermediate Latin II $(3,0,3)$ Continuation of LAT 201; practice with advanced grammatical constructions and translation of literary selections. A general education course (humanities). PREREQ: LAT 201 or equivalent.

LAT 280 Topics in Latin Language and Literature (1-3,0,1-3) Wide variety of authors, genres, and themes in Latin literature or specific problems in Latin grammar and style. May be repeated for credit once as topics vary. PREREQ: LAT 102 or equivalent.

## Organizational Leadership LDR

LDR 117 Introduction to Supervision (3, 0, 3) Functions of supervision; planning, organizing, directing, staffing, controlling, and delegating.

LDR 301 Cooperative Education (1-3 sem. hrs) Supervised application based work experience related to the Leadership major. Educational component coordinated among employer, student, and faculty. Minimum of 20 hours on the job per week for 3 credit hours. May be repeated up to 9 credit hours. PREREQ: restricted to Organizational Leadership majors; junior standing; prior approval of Co-op Coordinator before registration.

LDR 305 Human Relations in Organizations (3,0,3) Interpersonal skills regarding behavior, attitudes, value, communication, motivation, networking, team dynamics, organizational culture, and diversity.

LDR 308 Leadership in Organizations(3,0,3) Dynamics of leadership; how successful leaders think, act, make decisions, interact with people, and communicate. PREREQ: junior standing.

LDR 315 Personnel Management (3,0,3) Fundamentals of managing human resources including key issues such as planning, defining job requirements, recruitment and selection, training and development, performance appraisal, compensation and benefits, safety and health, and equal employment opportunity.

LDR 381 Organizational Ethics $(3,0,3)$ Fundamental role of ethics in leadership and decision making. Influence of personal morals, values, and beliefs in the organizational relationship between leaders and followers. Emphasis on personal ethical development, ethical theories in organization decisions, and application of ethical principles. PREREQ: Junior standing.

LDR 382 Organizational Change $(3,0,3)$ Contemporary theory on the leadership of organizational change, including best practices for implementing change, and assuring that change will be successful. PREREQ: Junior standing.

LDR 394 Topics: Organizational Leadership $(3,0,3)$ Specialized topics of interest to students and the organizational community. Topics for current offerings are listed in the Schedule of Classes. May be repeated if topics are different. IPREREQ: junior standing.

LDR 395 Teamwork in Organizations $(3,0,3)$ Dynamics of teamwork; roles of team leaders and qualities of team players, attributes and behavior of teams, and problem solving in a team environment. Studies include one or more real world team projects.

LDR 399 Independent Study in Organizational Leadership (1-3 sem hrs) Individualized study of a special topic under supervision of a faculty member. May be repeated.

LDR 480 Organizational Leadership Capstone (3,0,3) Classical and contemporary theories of organizations and organizational behavior. Organizational purpose; how and why people in organizations respond to their environment. Highly interactive; emphasis on experiential discussion, life-centered workshops, student presentations, and case analysis. PREREQ: restricted senior Organizational Leadership majors or by special faculty agreement.

## Library Science <br> LSC

LSC 190 Topics: Public Libraries (3 sem. hrs.) Public library trends, reader and technical services issues, management topics, preservation and conservation, automation developments, and other current issues. Topics will vary and will be selected from the above list. Days or evenings, summer.

## Developmental Mathematics MAH

MAH 080 Mathematics Assistance $(1,0,1)$ Supplementary instruction paired with selected developmental mathematics courses. May be repeated for credit when paired with different courses. Offered on a pass/fail basis. Not applicable toward graduation.

MAH 090 Basic Mathematical Skills (3,0,3) Signed numbers, fractions, decimals, percents, ratio and proportion, measurements, and introduction to algebra. Does not apply toward any graduation requirements.

MAH 091 Elementary Geometry (3,0,3) Lines and angle relationships; parallel lines; constructions; similar and congruent triangles; polygons; right triangles; circles; areas and volumes. Does not apply toward any graduation requirements.

MAH 092 Beginning Algebra (Part I) (1,0,1) Includes material covered in first five weeks of MAH 095. OPerations on real numbers, algebraic expressions, linear equations in one variable. Does not apply toward any graduation requirements. PREREQ: A minimum math ACT score of 15 (or SAT or COMPASS equivalent), $C$ or better in MAH 090, or placement by Developmental Math Program.

MAH 093 Beginning Algebra (Part II) (1,0,1) Includes material covered in the second five weeks of MAH 095. Linear equations and inequalities in one variable, applications, graphs and slopes of lines. Does not apply toward andy graduation requirements. PREREQ: MAH 092.

MAH 094 Beginning Algebra (Part III) $(1,0,1)$ Includes material covered in the third five weeks of MAH 095. Integer exponents, operations on polynomials, and factoring. Does not apply toward any graduation requirements. PREREQ: MAH 093.

MAH 095 Beginning Algebra $(3,0,3)$ Operations on real numbers, equations and inequalities in one variable, graphs of lines, integer exponents, operations on polynomials, and factoring with emphasis on applications. Does not apply toward any graduation requirements. PREREQ: A minimum math ACT score of 15 (or SAT or COMPASS equivalent), $C$ or better in MAH 090, or placement by Developmental Mathematics Program.

MAH 096 Intermediate Algebra (Part I) (1,0,1) Includes material covered in the first five weeks of MAH 099. Rational expressions and equations, ratio and proportion, variation, and applications. Does not count toward any graduation requirements. PREREQ: C or better in MAH 095 or MAH 094 or placement by Developmental Math Program.

MAH 097 Intermediate Algebra (Part II) (1,0,1) Includes material covered in the second five weeks of MAH 099. Functions, equations of lines, radicals, and rational exponents. Does not apply toward any graduation requirement. PREREQ: MAH 096.

MAH 098 Intermediate Algebra (Part III) (1,0,1) Includes material covered in the third five weeks of MAH 099. Systems of equations, graphs of parabolas and circles, quadratic equations, and applications. Does not apply toward any graduation requirements. PREREQ: MAH 097.

MAH 099 Intermediate Algebra (3,0,3) Rational expressions and equations; ratio and proportion; functions; equations of lines; systems of equations; compound inequalities; linear inequalities in two variables; radicals; graphs of lines, parabolas, and circles; quadratic equations with emphasis on applications. Does not apply toward any graduation requirements. PREREQ: $C$ or better in MAH 095 or placement by Developmental Mathematics Program.

## Mathematics <br> MAT

MAT 109 Algebra for College Students $(3,0,3)$ Review of more advanced topics from Algebra II essential for success in MAT 112 and MAT 119. MAT 109 does not count towards general education requirements. PREREQ: $C$ or better in MAH 099 or placement.

MAT 110 Introductory Probability (3,0,3) Enumeration techniques and probability theory. A general education course (mathematics). PREREQ: $C$ or better in MAH 099 or placement.

MAT 112 Applied Calculus (3,0,3) Applications of differential and integral calculus of one variable to business and the life sciences. Not open to students who have passed MAT 128 or MAT 129. A general education course (mathematics). PREREQ: $C$ or better in MAT 109 or placement.

MAT 114 Finite Mathematics $(3,0,3)$ Linear functions, matrix algebra, linear programming, and probability. Emphasis on applications to business. A general education course (mathematics). PREREQ: C or better in MAT 109 or placement.

MAT 115 Mathematics for Liberal Arts (3,0,3) Appreciation of mathematical ideas applied to problems from the real world; scheduling, voting schemes, apportionment, descriptive statistics, shape and symmetry, fractals, and population growth. For students of the liberal arts. A general education course (mathematics). PREREQ: $C$ or better in MAH 099 or placement.

MAT 115H Honors Mathematics for Liberal Arts (3,0,3) Appreciation of mathematical ideas applied to problems from the real world; scheduling, voting schemes, apportionment, descriptive statistics, shape and symmetry, fractals, and population growth. For students of the liberal arts. A general education course (mathematics). PREREQ: C or better in MAH 099 or placement.

MAT 118 Technical Mathematics (3,0,3) Geometry, trigonometry, analytic geometry, vectors, polar coordinates, complex numbers, systems of linear equations; trigonometric, exponential, and logarithmic functions; applications to technology. Not open to students who have passed MAT 128 or MAT 129. A general education course (mathematics). PREREQ: C or better in MAH 099 or placement.

MAT 119 Pre-Calculus Mathematics (3,0,3) Analytic geometry; algebraic, trigonometric, exponential, and logarithmic functions. Not open to students who have passed MAT 128 or MAT 129. PREREQ: C or better in MAT 109 or placement.

MAT 128 Calculus A $(3,0,3)$ Includes material covered in the first third of the MAT 129-MAT 229 sequence. Limits, differentiation with applications. Credit is not given for both MAT 129 and MAT 128. A general education course (mathematics). PREREQ: B or better in MAT 119 or placement.

MAT 129 Calculus I (4,0,4) Limits differentiation and integration with application. Recommended for all students interested in mathematics or science. Credit is not given for both MAT 129 and MAT 128. A general education course (mathematics). PREREQ: B or better in MAT 119 or placement.

MAT 140 Mathematics for Elementary and Middle Grades Teachers I (3,0,3) Basic concepts of numbers and arithmetic operations; number theory. Open only to students majoring in elementary or middle grades education. PREREQ: $C$ or better in both MAH 091 and MAH 099 or placement.

MAT 141 Mathematics for Elementary and Middle Grades Teachers II (3,0,3) Elements of geometry. Open only to students majoring in elementary or middle grades education. PREREQ: C or better in MAT 140.

MAT 185 Introductory Discrete Mathematics $(3,0,3)$ Number systems important in computer applications, logic, set theory, combinatorics and probability, graph theory. Not open to students who have completed MAT 385. A general education course (mathematics). PREREQ: C or better in MAT 109 or placement.

MAT 194 Mathematical Sciences Seminar (1,0,1) Introduction to disciplines in mathematical sciences; readings and discussions pertaining to the mathematical

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sciences. Topics vary. PREREQ: MAT 128 or MAT 129. COREQ: MAT 128 or MAT 129.

MAT 221 Calculus IIA $(3,0,3)$ Integration by parts, numerical methods for approximating integrals, calculus of parametric and polar curves, vectors, equations of lines and planes, calculus of vector-valued functions. PREREQ: $C$ or better in MAT 120 or MAT 122.

MAT 227 Calculus B $(3,0,3)$ Includes material covered in the middle third of the MAT 129-MAT229 sequence. Integration with applications, the Fundamental Theorem of Calculus, calculus of exponential, logarithmic, and inverse functions, integration by parts; calculus of parametric equations and polar curves. $A$ general education course (mathematics). PREREQ: C or better in MAT 128.

MAT 228 Calculus C $(3,0,3)$ Includes material covered in the last third of the MAT 129-MAT 229 sequence. Approximate integrals, improper integrals, infinite sequences and series, tests for convergence and divergence, power series, Taylor and Maclaurin series with applications; calculus of vector-valued functions. Credit is not given for both MAT 228 and MAT 229. PREREQ: $C$ or better in MAT 227.

MAT 229 Calculus II $(5,0,5)$ Calculus of exponential, logarithmic, and inverse functions; Techniques of Integration; Arc Length; calculus of parametric equations and polar curves; infinite sequences and series; introduction of vectors and Geometry of space; dot product and cross product. Credit is not given for both MAT 229 and MAT 228. PREREQ: C or better in MAT 129 or MAT 227.

MAT 234 Linear Algebra (3,0,3) Vectors, matrix arithmetic, vector spaces, linear transformations, and applications. PREREQ: $C$ or better in MAT 229 or MAT 228.

MAT 240 Geometry for Middle School Teachers (3,0,3) Points, lines, and planes; curves and surfaces; congruence; similarity; parallelism; transformation, tessellations; systems of measure; perimeter; area; volume; angle measure. Appropriate computer software will be introduced. Only open to students majoring in elementary or middle school education. PREREQ: $C$ or better in MAT 141.

MAT 294 Topics: Mathematics $(3,0,3)$ Topics in mathematics or mathematics education. Topics vary. PREREQ: varies with topic (see Schedule of Classes).

MAT 299 Directed Readings/Independent Study (1-3 semester hours) PREREQ: consent of instructor.

MAT 302 Introduction to Higher Mathematics $(3,0,3)$ Essentials of logic; methods of proof; set theory. PREREQ: C or better in MAT 228 or MAT 229.

MAT 305 History of Mathematics (3,0,3) Mathematics from ancient times through development of the calculus. PREREQ: $C$ or better in MAT 129 or MAT 227.

MAT 310 Elementary Theory of Numbers $(3,0,3)$ Numbers and their representation, divisibility, and factorization; prime numbers; congruences; primitive roots; quadratic reciprocity; diophantine equations. PREREQ: $C$ or better in MAT 302.

MAT 324 Mathematical Problem Solving ( $3,0,3$ ) Heuristics of mathematical problem solving. PREREQ: $C$ or better in MAT 302.

MAT 325 Differential Equations (3,0,3) Ordinary differential equations, with applications. PREREQ: C or better in MAT 228 or MAT 229.

MAT 329 Calculus III (4,0,4) Cylindrical and Spherical Coordinates; Space Curves; Differentiation and Integration of vector functions; Differentiation of functions of several variables, multiple integrals; vector fields; line and surface integrals; Green's Theorem; Stokes Theorem and the Divergence Theorem. PREREQ: C or better in MAT 228 or MAT 229.

MAT 330 Classical Applied Analysis (3,0,3) Fourier series; orthogonal expansions; eigenvalue problems; boundary value problems in ordinary and partial differential equations. Same as PHY 330. PREREQ: C or better in MAT 234 and MAT 325.

MAT 340 Probability II $(3,0,3)$ Further study of topics in STA 250; multivariate distributions, approximations, functions of random variables; additional topics. PREREQ: C or better in STA 250 and MAT 228 or MAT 229.

MAT 345 Introduction to Geometry (3,0,3) Axiomatic Euclidean geometry; introduction to non-Euclidean geometries. PREREQ: $C$ or better in MAT 302.

MAT 360 Numerical Analysis $(3,0,3)$ Numerical integration, solution of nonlinear equations by iterative processes; functional approximation and interpolation; initial value problems. PREREQ: C or better in MAT 228 or MAT 229, and MAT 234 and INF 260.

MAT 375 Applied Mathematical Models (3,0,3) Basic mathematical models arising in biology, psychology, sociology, political science, and decision science; exponential growth, predator-prey, Markov chain, learning theory, linear and nonlinear programming, waiting line, and simulation models. PREREQ: $C$ or better in (MAT 129 or MAT 227) and (STA 205 or STA 212 or STA 250).

MAT 380 Combinatorics and Graph Theory $(3,0,3)$ Enumeration via combinations, permutations, generating functions, and recurrence relations; graph theory with trees, directed graphs, and networks; applications. PREREQ: $C$ or better in MAT 302.

MAT 385 Discrete Mathematics $(3,0,3)$ Propositional and predicate logic; proof techniques; recurrence relations; basic set theory; introduction to graphs, Boolean algebra; finite state machines. PREREQ: C or better in MAT 228 or MAT 229.

MAT 394 Topics: Mathematics $(3,0,3)$ Topics vary. PREREQ: varies with topic (see Schedule of Classes).

MAT 399 Directed Readings (1-3 sem. hrs.) PREREQ: consent of instructor.
MAT 410 Abstract Algebra I $(3,0,3)$ Basic number theory, including divisibility properties of integers and congruences; introduction to groups, rings, and fields. PREREQ: C or better in MAT 234 and MAT 302.

MAT 415 Abstract Algebra II $(3,0,3)$ Extensive study of one or more of the topics considered in MAT 410. PREREQ: $C$ or better in MAT 410.

MAT 420 Real Variables I $(3,0,3)$ Foundations of calculus; topology of Cartesian spaces; convergence; continuous functions. PREREQ: C or better in MAT 302 and MAT 329.

MAT 421 Real Variables II $(3,0,3)$ Sequences and series of functions; integration. PREREQ: $C$ or better in MAT 420.

MAT 430 Complex Variables $(3,0,3)$ Analytic functions of a complex variable; Cauchy's theorem and Cauchy's formula; power series; contour integrals; conformal mapping; calculus of residues. PREREQ: C or better in MAT 302 and MAT 329.

MAT 483 Cryptology $(3,0,3)$ Cryptology of classical ciphers, mathematical foundations of cryptology, Hill cipher, DES and AES, cryptography of public key cryptosystems. PREREQ: MAT 234 or CSC 362 or CSC 364.

MAT 494 Topics: Mathematics $(3,0,3)$ Topics in mathematics or mathematics education. Topics vary. PREREQ: varies with topic (see Schedule of Classes).

MAT 497 Mathematical Sciences Capstone (3,0,3) Directed projects in the mathematical sciences. PREREQ: 30 semester hours earned toward the major in mathematics.

MAT 499 Directed Readings (1-3 semester hours) PREREQ: consent of instructor.

MAT 584 Cryptography $(3,0,3)$ Cryptology of classical ciphers, DES and AES, public key cryptosystems, authentication and cryptographic hash functions. PREREQ: consent of instructor.

MAT 594 Topics: Mathematics $(3,0,3)$ Topics in mathematics and mathematics education. Topics vary. PREREQ: varies with topic (see Schedule of Classes).

## Medieval Studies MDS

MDS 201 Introduction to Medieval Culture (3,0,3) Concepts and methods related to study of arts, history, literature, social institutions, and thought of middle ages. Required for medieval studies minor.

MDS 401 Seminar: Medieval Studies $(3,0,3)$ Selected topics in culture of the middle ages; student research on issues related to topic. Required for medieval studies minor. PREREQ: MDS 201 and 9 semester hours of courses in medieval studies curriculum.

## Management MGT

MGT 100 The Business of Management (3,0,3) K.E.T. telecourse covering the basic elements of management, including planning, organizing, motivation, and communication in a variety of business settings. Does not fulfill any requirements for bachelor's degree programs in the College of Business. Not open to seniors with a declared major in any business discipline.

MGT 205 Business Management Principles ( $3,0,3$ ) Introduction to business firms, their organization, functions, and management in context of global, legal, and ethical environments; business as a setting in which people work, make decisions, and contribute productively to society; management of people, information, and processes to achieve organizational goals. PREREQ: sophomore standing.

MGT 206 Leadership Assessment and Development I (3,0,3) Identify and assess leadership competencies and values. Gather and interpret data assessing strengths and weaknesses and develop an individualized learning plan to maximize use of courses and experiences and to stimulate self-directed learning. Complete career research and service projects to begin developing analytical, networking, oral presentation, writing, leadership, problem solving, and teamwork skills. Open only to pre-management majors. PREREQ: sophomore standing.

MGT 240 Managerial Communications (3,0,3) Writing managerial documents: memoranda; letters; e-mail; short formal special reports; executive summaries and informal notes to superiors, peers and subordinates. Speaking as a manager through formal and informal addresses, business meetings, news conferences. Prepares students to write and speak effectively when solving problems managers face. Open only to pre-management majors. PREREQ: ENG 101, CMST 101 and sophomore standing.

MGT 300 Behavior in Organizations: Understanding Organizational Life $(3,0,3)$ Overview of the complex organizational, group, and individual processes constituting the internal environment of contemporary business organizations; understanding the dynamics and learning the concepts, theories, processes, and skills suggested by research to underlie effective planning, organizing, interacting, and controlling. PREREQ: junior standing.

MGT 305 Operations Management in Business $(3,0,3)$ Concepts of operations in production and service organizations; application of quantitative and qualitative techniques to quality, human resources, forecasting, inventory, and process improvement problems. PREREQ: MAT 114 and STA 212; junior standing.

MGT 306 Project Management $(3,0,3)$ This course is an introduction to the concepts, tools and techniques of Project Management. The goal is to provide the student with a fundamental knowledge of project planning, budgeting, scheduling, work breakdown structures, risk analysis, project monitoring and project control/termination. Group projects, presentations, class discussions and case exercises will provide the vehicle for developing decision-making, communication, interpersonal and leadership skills that are essential for success in the workplace. PREREQ: MGT 300, MGT 305 and junior standing.

MGT 307 Supply Chain Management $(3,0,3)$ An upper level undergraduate elective designed to familiarize the student with the scope of supply chain management in organizations. Exposure to key dimensions of effective supply chain management, including those related to logistics, purchasing, information systems, asset management, and strategic supply chain configuration will be provided. Focus will be on the key managerial decisions required to effectively design and operate a supply chair. PREREQ: MGT 300, MGT 305 and junior standing.

MGT 310 Managerial Behavior $(3,0,3)$ Human aspects of organizations that contribute to individual and collective effectiveness; practical and theoretical areas of motivation, leadership, and micro and macro aspects of organizational design. PREREQ: MGT 205 and junior standing.

MGT 320 Managing a Diverse Workforce $(3,0,3)$ This course will provide an overview of the theories and concepts of managing diversity. Students will understand the importance of managing a diverse workforce, gain self-awareness of their individual diversity and develop an awareness and skill set for understanding, analyzing, evaluating, and managing diversity issues in the worjplace. PREREQ: MGT 300.

MGT 330 Negotiation and Conflict Resolution $(3,0,3)$ The skills, knowledge and abilities to negotiate effectively with others are important to managers and employees in all types of organizations; business, governmental, non-profit, health-care and professional. The purpose of this course is to provide students with the theory, tactics, and practices that will enable them to negotiate successfully and resolve conflicts. Core subjects include negotiation preparation; distributive and integrative bargaining; strategies and tactics; gaining leverage through power and persuasion; and the influences of ethics, gender and culture. In addition to use of mediation and arbitration techniques to resolve conflicts are presented. The course requires students to learn through active participation in negotiation of actual cases. PREREQ: junior standing.

MGT 340 Human Resources Administration (3,0,3) Recruitment and selection of labor force; training of employees; management development; wage and salary plans; personnel policies; development of personnel policies consistent with government regulations. PREREQ: MGT 300 and junior standing.

MGT 350 Performance Management $(3,0,3)$ This course will provide students the opportunity to learn the knowledge and skills essential to managing effectively employee performance. Primary topics will include: employee training and development methods, processes of defining and measuring performance as well as providing developmental feedback, and performance-based reward systems. PREREQ: MGT 340 and junior standing.

MGT 360 International Management (3,0,3) Management of the multinational firm; cross cultural issues; differences in attitudes and behaviors, organizational structure, environmental considerations between domestic and multinational firms; host country subsidiary relations in an international context. PREREQ: MGT 300 and junior standing.

MGT 394 Topics: Management $(3,0,3)$ Specialized topics of student and business community interest. Topics for current offering listed in Schedule of Classes. With adviser's approval may be taken three for elective credit if topics differ. PREREQ: MGT 300 and junior standing.

MGT 396 Internship: Management ( $0,5,15,1,3$ ) Application of theoretical knowledge in solving business problems through consulting and counseling with business owners; groups work in case analysis and problem solving. May be repeated once for credit. Open only to juniors certified as majoring in business. PREREQ: MGT 300 and consent of instructor.

MGT 406 Leadership Assessment and Development II (3,0,3) Identify and assess competencies and values relevant to leadership at the end of the program. Reflect on the development that has occurred during the program. Develop and implement life-long learning plans for acquiring future needed competencies. Open only to students certified as Management majors. PREREQ: MGT 206, MGT 310, MGT 340 and senior standing.

MGT 410 Managing Organizational Change (3,0,3) Application of theories of organizational change to a variety of business organizations; planning and implementing of organizational change as well as its behavioral aspects; use of simulations, cases, and/or projects to blend theory and practice. Open only to students certified as majoring in business disciplines. PREREQ: MGT 300 and senior standing.

MGT 415 Continuous Quality Improvement in Operations (3,0,3) Advanced operations management approaches to quality; process and productivity improvement in manufacturing, and service and government organizations; use of case studies, exercises, and/or term projects to show application of management and quantitative concepts. Open only to students certified as majoring in business disciplines. PREREQ: MGT 300, MGT 305 and senior standing.

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MGT 490 Business Policy $(3,0,3)$ Application of theoretical knowledge to a wide variety of business situations; development of top management viewpoint in developing and assessing corporate strategy; case method and classroom presentations. Open only to students certified as majoring in business disciplines; recommended to be taken during the last 18 semester hours of business coursework. PREREQ: MGT 300, FIN 305, MGT 305, MKT 305, and senior standing.

MGT 499 Independent Study: Management (1-3 sem. hrs.) Students pursue a topic or project of interest to them. Meeting times arranged with instructor. Open only to students certified as majoring in business or by consent of instructor. PREREQ: MGT 300 and consent of instructor.

## Media Informatics MIN

MIN 240 Introduction to Integrated Media $(2,4,3)$ Introduction to the concepts and practices of Media Informatics, including media compression, DVD authoring and Flash (.swf) animation. The development and function of the internet as the delivery system for, personal and business digitized media content will be explored. PREREQ: C or better in EMB 140; PREREQ or COREQ: ART 221.

MIN 340 Advanced Integrated Media $(2,4,3)$ A continuation of MIN 240, this course develops already existing skills and concepts of Media Informatics, including media compression, DVD authoring, Flash (.swf) animation and database integration with media. PREREQ: C or better in MIN 240.

MIN 352 Writing for Digital Media $(3,0,3)$ This course examines how nonfiction text is mediated by technological distribution through digital devices. Students learn how to write nonfiction across the media. Students take pieces written for the medium of paper and alter them for distribution on the Web and through other digital media. Students examine how the text should change depending upon the medium used to transmit it to an audience. PREREQ: MIN 240, ART 221.

MIN 394 Special Topics in Media Informatics (3,0,3) Focused study of a significant topic from a media informatics perspective. Topics vary semester to semester. May be repeated once for credit.

MIN 396 Internship: Media Informatics (0, 2-6,1-3) Selected placement for majors in businesses and non-profit organizations in positions directly related to the field. Assigned work may involve content design, programming, e-commerce applications, digital advertising, animation, production writing or others covered within the MIN arena. Repeatable once for full credit if second experience involves a different employer and/or responsibilities. PREREQ: Junior standing, permission of supervising faculty.

MIN 481 Design of Immersive Experiences $(3,0,3)$ An overview of the design of 3D interactive games and virtual reality designed for media students with only elementary programming experience. Includes a survey of the theoretical background of gaming as well as practice with a design tool and a game engine. PREREQ: INF 260, MIN 340.

MIN 496 Senior Practicum $(3,0,3)$ Students work on team projects that allow them to integrate academic experience into real world situations. Required electronic portfolio is reviewed and evaluated with revisions applied. Students undertake assignments to build organizational competencies such as communication skills, teamwork, and critical thinking. PREREQ: MIN major, senior standing.

## Marketing <br> MKT

MKT 100 Marketing $(3,0,3)$ K.E.T. telecourse examining basic marketing concepts, trends, and strategies in a variety of contemporary business organizations. Does not fulfill any requirements for bachelor's degree programs in the College of Business. Not open to seniors with a declared major in any business discipline.

MKT 305 Principles of Marketing (3,0,3) Flow of goods from producer to consumer; demand-stimulated and demand-fulfilling activities of business enterprises; marketing concepts and systems analysis. PREREQ: junior standing.

MKT 306 Sales Management $(3,0,3)$ Managing the sales force and overall marketing and promotional strategy; organization of selling, quotas, territories,
expenses, policy changes, and competition. PREREQ: MKT 305 and junior standing.

MKT 307 Retail Management $(3,0,3)$ Retail sub-channel of distribution; role of retailing in meeting consumer and producer needs in distribution; distribution cost analysis at retail level; merchandising, promotion, and control. PREREQ: MKT 305 and junior standing.

MKT 308 Advertising and Promotion (3,0,3) Design, management, and coordination of marketing communications. PREREQ: MKT 305 and junior standing.

MKT 310 Principles of Professional Selling $(3,0,3)$ Strategies, theories, and personal skills involved in professional and effective sales; the role of selling in marketing. PREREQ: MKT 305 and junior standing.

MKT 320 Consumer Behavior ( $3,0,3$ ) Psychological, sociological, economic, and other dimensions of consumers and their environment. PREREQ: MKT 305 and junior standing.

MKT 340 Business to Business Marketing $(3,0,3)$ The non-consumer marketing world; strategies, techniques, and analytical approaches. PREREQ: MKT 305 and junior standing.

MKT 360 International Marketing (3,0,3) As technologies, ideas and people transfer across national boundaries, organizations are becoming active, competitive participants in a global economy. These developments will mean that more organizations will need marketers with the ability to apply the marketing processes across countries and cultures. This course emphasizes a non-US perspective, SME involvement in international marketing, and alternative trade organizations as a way to develop more global-minded marketing managers who appreciate various dimensions of international business. PREREQ: MKT 305.

MKT 392 Marketing Research $(3,0,3)$ Introduction to role of research in marketing decision making including research designs and methodologies, primary and secondary data collection, and sampling techniques. PREREQ: MKT 305, STA 212, and junior standing.

MKT 394 Topics: Marketing Issues $(3,0,3)$ Specialized topics of faculty and student interest. Topics vary and may include product planning and development, distribution, pricing strategies, services marketing, and international marketing. May be taken three for elective credit if topics differ. PREREQ: MKT 305 and junior standing.

MKT 480 Marketing Strategies and Policies $(3,0,3)$ Decision making related to objectives in performing marketing functions; adjustment of goods and services to consumer demand; simulated competition and case methodology. Open only to students certified as majoring in business or by consent of instructor. PREREQ: MKT 320, MKT 392, and senior standing.

MKT 492 Research: Advanced Marketing Research (3,0,3) Development of advanced marketing research skills and knowledge through lecture/discussion and a field research study. Open only to students certified as majoring in business disciplines. PREREQ: ENG 340 (or OST 311), MKT 320, MKT 392, senior standing, or consent of instructor.

MKT 499 Independent Study: Marketing (1-3 sem. hrs) Students pursue a topic or project of interest to them. Meeting times arranged with instructor. Open only to students certified as majoring in business or by consent of instructor. PREREQ: MKT 305, senior standing and consent of instructor.

## Music <br> MUS

MUS 100 Music Appreciation $(3,0,3)$ Survey of the development of mankind in western civilization through the study of music literature, music history, and basic components of music. For students not majoring in music. A general education course (humanities or fine arts).

MUS 105, 305 Ensemble Accompanying (1-3 sem. hrs. each) Accompanying ensembles, one per semester as assigned. PREREQ: consent of instructor. May be repeated for credit.

MUS 106 Music of World Cultures ( $(3,0,3)$ An overview of traditional musics from many cultures and regions throughout the world; examination of music as a cultural phenomenon and its role in the traditional lives of various societies in the twentieth century. A general education course (non-western).

MUS 107 Survey of African-American Music (3,0,3) Music of the present; oral folk tradition; transition to present day works of African-American composers, and their relationships to western and non-western traditions. A general education course (humanities, fine arts, or race/gender).
MUS 108 History of Rock \& Roll $(3,0,3)$ Survey of the history, aesthetics, and sociology of rock and roll in the United States from its origins to the present. A general education course (fine arts or humanities).

MUS 109 History of American Popular Music (3,0,3) Survey of the history and development of American popular music from 1940 to the present. A general education course (humanities or fine arts).

MUS 110 Appreciation of Jazz $(3,0,3)$ Jazz, its historical background, and its stylistic development in the U.S. Designed for students majoring in any subject. A general education course (humanities or fine arts).

MUS 120 Introduction to Music Theory ( $0,3,1$ ) Notational vocabulary and basic reading skills. For students with limited background in music.

MUS 121 Introduction to Aural Skills (0,2,1) Introduction to aural skills: sight singing, dictation, and keyboard harmony.

MUS 122 Theory I $(3,0,3)$ Basic vocabulary of music and its application to harmony, counterpoint, and analysis. Students registering for music theory will be given theory placement tests and assigned to MUS 120 or MUS 122.

MUS 123 Theory II (3,0,3) Continuation of MUS 122, PREREQ: MUS 122.
MUS 124 Aural Skills I ( $0,2, .5$ ) Sight singing, dictation, and keyboard harmony.
MUS 125 Aural Skills II (0,2,.5) Continuation of MUS 124.

MUS 126 Aural Skills III (0,3,.5) Continuation of Aural Skills sequence. PREREQ: MUS 125.

MUS 127 Aural Skills IV ( $0,3, .5$ ) Continuation of Aural Skills sequence.

MUS 130 Introduction to Music Literature (2,1,2) Major forms and some important masterworks of western music from the Renaissance through the 20th century; development of listening skills.

MUS 135 Class Piano for Non Music Students I $(0,2,1)$ Group instruction in piano; development of reading, technique, and functional keyboard skills for students not majoring in music.

MUS 136 Class Piano for Non-Music Students II ( $0,3,1$ ) Intermediate level group instruction in piano; further development of reading technique, and functional keyboard skills for students not majoring in music. Limit 18 per class. PREREQ: MUS 135 or 1 or more years of private piano study, or consent of instructor.

MUS 140 Class Piano I $(0,3, .5)$ Group instruction in piano; development of reading, technique, and functional skills helpful for elementary school teachers and others majoring in music.

MUS 141 Class Piano II (0,3,.5) Continuation of MUS 140.

MUS 142 Class Piano III $(0,3, .5)$ Continuation of MUS 141. PREREQ: MUS 141.

MUS 143 Class Piano IV (0,3,.5) Continuation of MUS 142.

MUS 146 Group Voice $(1,2,1)$ Vocal technique; theory and development of the singing voice; posture, breathing, correct tone production, diction, and stage deportment. For students majoring in music.

MUS 147 Harpsichord for Pianists $(1,2,1)$ Technique; introduction to renaissance, baroque, and 20th century repertoire; performance practices; comparison
of harpsichord and piano technique and style. Limit four per class. May be repeated for credit. PREREQ: consent of instructor.

MUS 148 Group Guitar $(1,2,1)$ Group instruction in beginning guitar; development of reading, technique, and functional skills helpful for elementary school teachers and others majoring in music.

MUS 149 Organ for Pianists I $(1,2,1)$ Manual and pedal technique, registration, beginning repertoire, service playing. Limit four per class. May be repeated for credit. PREREQ: consent of instructor.

MUS 150 Organ for Pianists II $(1,2,1)$ Advanced manual and pedal technique, registration, advanced repertoire, service playing. Limit four per class. May be repeated for credit. PREREQ: consent of instructor.

MUS 168-189 Applied Music (1-2 sem. hrs.) Private instruction in harpsichord, harp, voice, piano, piano accompanying, organ, guitar, and band and orchestral instruments. Open to students majoring or minoring in music; to other students by permission of music chair. May be repeated for credit. $1 / 2$ contact hour $=1$ sem. hr.; 1 contact hour 2 sem. hrs. Fees assessed according to contact hours. PREREQ: placement audition.

MUS 196 Recital Review ( $0,2,0$ ) Students majoring in music, unless excused by the music chair, must register each semester for, and pass, MUS 196. Course requirements are satisfied by certified attendance and review a minimum of 16 approved recitals/concerts per semester (eight during student teaching).

MUS 197 Freshman Proficienty Jury $(0,0,0)$ As part of the admission process to a music degree program, freshmen students majoring in music must pass a freshman Proficiency Jury in applied music after two semesters of applied study.

MUS 222 Theory III $(3,0,3)$ Continuation of MUS 123. Advanced contrapuntal and harmonic vocabulary and techniques. PREREQ: MUS 123.

MUS 223 Theory IV $(3,0,3)$ Chromatic vocabulary; extended tonality approached through analysis and composition. PREREQ: MUS 222.

MUS 224 Aural Skills V (0,2,.5) Advanced dictation; sight singing and keyboard harmony. PREREQ: MUS 127.

MUS 225 Aural Skills VI (0,2,.5) Continuation of MUS 224, with chromatic materials.

MUS 226 Aural Skills VII $(0,3, .5)$ Continuation of Aural Skills sequence. PREREQ: MUS 225.

MUS 227 Aural Skills VIII $(0,3, .5)$ Continuation of Aural Skills sequence.
MUS 228 Applied Composition I (1-2 sem. hr. each) Private or semi-private instruction in music composition. May be repeated for credit. 1/2 contact hour=1 sem. hr.; 1 contact hour $=2$ sem. hrs. PREREQ: placement test; at least 2.50 in music theory/aural skills. Fees assessed according to contact hours.

MUS 229 Applied Composition II (1-2 sem. hr. each) Private or semi-private instruction in music composition. Maybe repeated for credit. $1 / 2$ contact hour $=1$ sem. hr.; 1 contact hour $=2$ sem. hrs. PREREQ: MUS 228. Fees assessed according to contact hours.

MUS 230 History of Music I: Antiquity through Early Baroque (3,0,3) Music in western civilization from the earliest sources to the late 17th century. (ca. 1680). A general education course (humanities or fine arts).

MUS 231 History of Music II: Late Baroque to Mid 19th Century (3,0,3) Music in western civilization from ca. 1680to ca. 1850. A general education course (humanities or fine arts).

MUS 235 Jazz Harmony/Piano I (0,3,1) Introduction to jazz harmony and jazz piano skills. PREREQ: MUS 143.

MUS 236 Jazz Harmony/Piano II ( $0,3,1$ ) Advanced study in jazz harmony and jazz piano skills. PREREQ: MUS 235.

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MUS 237 Jazz Improvisation I (1,2,2) Application of jazz vocabulary and melodic constructs within the jazz repertoire; ear training through transcription of solos; and memorization of standard jazz repertoire.

MUS 238 Jazz Improvisation II $(1,2,2)$ Continued study of the tools of jazz improvisation; application and study of Bebop vocabulary; transcription of Bebop and Hard Bop solos; memorization of solos. PREREQ: MUS 237.

MUS 241 Applied Methods and Materials: Brass $(1,2,1)$ Class instruction in performance and pedagogy.

MUS 243 Applied Methods and Materials: Woodwinds (1,2,1) Class instruction in performance and pedagogy.

MUS 245 Applied Methods and Materials: Strings (1,2,1) Class instruction in performance and pedagogy.

MUS 247 Applied Methods and Materials: Percussion (1,2,1) Class instruction in performance and pedagogy.

MUS 249 Instruments for Singers, Pianists, and Guitarists (2,0,1) Instrumental techniques, basic transpositions, and fundamentals of pedagogy; instruction in dealing with instruments as a conductor. PREREQ: Music education major or consent of instructor.

MUS 253 Women in Music in Europe and America I: 800-1900 (3,0,3) The role of women as composers, performers, teachers, scholars, and patrons, from the minstrels of the Middle Ages and Convents of the Renaissance, to the concert stages of the early 20th Century.

MUS 254 Women in Music in Europe and America II: The 20th Century $(3,0,3)$ The role of women as composers, performers, conductors, administrators, teachers, scholars, and patrons.

MUS 260 Music Fundamentals and Skills for Classroom Teachers (1,2,3) Designed to train teachers in grades one through six to read music; keyboard, auto harp, and recorder experiences; methods and materials. For students not majoring in music.

MUS 261 Class Piano V $(0,3, .5)$ Continuation of Class Piano sequence. PREREQ: MUS 144.

MUS 262 Class Piano VI (0,3,.5) Continuation of MUS 261.
MUS 263 Class Piano VII $(0,3, .5)$ Continuation of Class Piano sequence. PREREQ: MUS 262.

MUS 264 Class Piano VIII (0,3,.5) Continuation of MUS 263.
MUS 268-289 Applied Music (1-2 sem. hrs. each) Private instruction in harpsichord, harp, voice, piano, piano accompanying, organ, guitar, and band and orchestral instruments. Open to students majoring or minoring in music; to other students by permission of music chair. May be repeated for credit. $1 / 2 \mathrm{hr}$. contact $=1$ semester hour, 1 hr . contact = 2 semester hours. Fees assessed according to contact hours. PREREQ: placement test.

MUS 291W Advanced Writing in the Music Profession (3,0,3) Practice in a variety of expository forms common to the field of music; concert review, musical analysis, program notes, press release, journal article, research paper; and development of strong research skills. A general education course (Written Communication II). PREREQ: ENG 101, MUS 122. Open to non-music majors and music majors who have not completed MUS 122 with consent of instructor.

MUS 296 Piano Proficiency $(0,0,0)$ All students majoring in music must pass a piano proficiency examination to qualify for admission to a degree program.

MUS 297 Junior Standing Jury $(0,0,0)$ At the end of four semesters of applied study, students majoring in music must pass the Junior Standing Jury in applied music to qualify for admission to a degree program.

MUS 301 The Northern Corale $(0,3,1)$ Chorale ensemble specializing in choral literature ranging from short ocavos to extended works. For students majoring in
voice and in music, and for musically talented general students. May be repeated for credit. PREREQ: audition the first class period.

MUS 302 Chamber Choir $(0,6,1)$ A select choral ensemble specializing in a variety of the best choral literature. For music students, voice students. PREREQ: audition.

MUS 303 Women's Ensemble ( $0,3,1$ ) Open to all female students. Performance of a variety of music. No audition necessary. May be repeated for credit.

MUS 304 Opera Workshop $(2,2,2)$ Musical and dramatic principles and techniques required of performers in musical theatre; needs of the singing actor, class presentations of roles and scenes from standard and contemporary operas and musicals. May be repeated for credit. PREREQ: audition.

MUS 305 Ensemble Accompanying (1-3 sem. hrs. each) Accompanying ensembles, one per semester as assigned. PREREQ: consent of instructor. May be repeated for credit.

MUS 306 Vocal Jazz Ensemble ( $(3,0,1)$ A select choral ensemble specializing in vocal jazz performance and literature; singing in various jazz styles, improvisational singing, microphone techniques, and balance and blend for a small ensemble. May be repeated for credit. PREREQ: audition.

MUS 308 NKU Philharmonic $(0,3,1)$ Orchestral ensemble that rehearses and performs repertoire from the early Baroque to the present. Participation is open to all students, community members, and qualified students of the NKU Preparatory Program. May be repeated for credit. PREREQ: audition and consent of instructor.

MUS 309 Introduction to Music Education (3,0,3) Students examine the teaching profession and schooling as it currently functions in America. Emphasis on the Kentucky Education Reform Act, educational theory, and educational practice. Provides music education majors an overview of the total school music program. Observation and clinical experience required. PREREQ: 48 semester hours as specified in the curriculum contract; at least 2.50 GPA ; completion of pre-music curriculum.

MUS 310 Chamber Music Ensembles (1,2,1 each) Participation in several ensembles to study and perform chamber music literature. May be repeated for credit. PREREQ: audition.

MUS 311 Accompanying and Chamber Music (1,2,1) Drill in sight reading; training in listening and anticipating; following and leading; matching tone, color, and mood of the solo part; rescuing a soloist in trouble, and assuming a solo role when appropriate. May be repeated for credit.

MUS 312 Computer Applications for Musicians $(2,1,1)$ Introduction to computer uses for musicians and their art; basic concepts of electronic music, music scoring, part writing, and desktop publishing for musical programs; word processing, spreadsheets; data bases, graphics, and communications; MIDI (musical instrument digital interface); computer ethics. Required in place of EDU 313 for students majoring in music education. PREREQ: MUS 123.

MUS 313 Advanced Electronic and Computer Music Techniques (2,1,3) Computer applications unique to musicians and their art; further development of skills in electronic music, computer music publishing and part writing, and music desktop publishing; advanced MIDI (musical instrument digital interface) techniques and realization of music through computer playback of digitized sampled sound. May be repeated for credit. PREREQ: MUS 312 or consent of instructor.

MUS 314 University Concert Band ( $0,3,1$ ) Preparation and performance of a wide variety of band literature. May be repeated for credit. Open to all students. NO audition necessary.

MUS 315 Chamber Orchestra ( $0,3,1$ ) Preparation and performance of traditional and contemporary literature for small orchestra; public concerts and performance for university functions. May be repeated for credit. PREREQ: audition.

MUS 316 Symphonic Winds $(0,6,1)$ Preparation of performance of traditional and contemporary literature for band; public concerts and performance for university functions. Open to all students. May be repeated for credit. PRERE: auditions.

MUS 317 Jazz Ensemble ( $0,3,1$ ) Preparation and performance of traditional and contemporary literature for large jazz ensemble; public concerts and performance for university functions. May be repeated for credit. PREREQ: audition.

MUS 318 Brass Choir $(0,3,1)$ Preparation and performance of traditional and contemporary literature for large brass ensemble; public concerts and performance for university functions. May be repeated for credit. PREREQ: audition

MUS 319 Percussion Ensemble ( $0,2,1$ ) Preparation and performance of traditional and contemporary literature for large percussion ensemble; public concerts and performance for university functions. May be repeated for credit. PREREQ: audition.

MUS 321 Jazz Arranging I $(2,1,2)$ Study of basic harmonic and melodic analysis, chord construction, rhythms, chord/scale relationships, nomenclature, and voice leading in the jazz idiom. PREREQ: MUS 123, 127.

MUS 322 Jazz Arranging II $(2,1,2)$ Advanced concepts of jazz theory, composition, and arranging. PREREQ: MUS 321.

MUS 324 Orchestration I $(3,0,3)$ Instrumentation and scoring for orchestral choirs and full orchestra. PREREQ: MUS 223or consent of instructor.

MUS 325 Form and Analysis $(3,0,3)$ Harmonic, contrapuntal, and formal procedure in works of major composers; techniques of musical analysis. Required for all music degrees that have a 300 level theory requirement. PREREQ: MUS 223 and MUS 225.

MUS 326 Materials and Techniques of Music Composition (2,0,2) Exploration of the compositional techniques, resources, and technologies available to composers today; concentration on creative and analytical projects. PREREQ: MUS 223.

MUS 328 Applied Composition III (1-2 sem. hrs. each) Private or semi private instruction in music composition. May be repeated for credit. 1/2 contact hour=1 sem. hr.; 1 contact hour $=2$ sem. hrs. Fees assessed according to contact hours. PREREQ: MUS 229 and junior standing.

MUS 329 Applied Composition IV (1-2 sem. hrs. each) Private or semi private instruction in music composition. $1 / 2$ contact hour $=1$ sem. hr.; 1 contact hour $=$ 2 sem. hrs. Fees assessed according to contact hours. PREREQ: MUS 328.

MUS 331 Keyboard Literature I $(2,0,2)$ Keyboard literature and its development from the renaissance to the early classical period; performance practices, interpretation, and styles. PREREQ: MUS 230231 or consent of instructor.

MUS 332 Keyboard Literature II $(2,0,2)$ Keyboard literature and its development from the middle classical period to the present; performance practices, interpretation, and styles. PREREQ: MUS 331.

MUS 333 Vocal Literature (3,0,3) Solo song repertoire of western world from the troubadours to the present; style, interpretation, and program building. PREREQ: MUS 230-231 or consent of instructor.

MUS 336 Choral Literature $(3,0,3)$ Choral literature from 1450 to the present; stylistic traits, types of compositions; aesthetic considerations. PREREQ: MUS 231 or consent of instructor.

MUS 337 History of Music III: Mid 19th and 20th Centuries (3,0,3) Music in western civilization from ca. 1850 to the present. Required of all students majoring in music as an upper division history and literature course. PREREQ: MUS 230-231.

MUS 339 History of Jazz $(3,0,3)$ Overview of the major stylistic periods of jazz from its origins through the late 1970’s. PREREQ: MUS 130.

MUS 340 General and Vocal Music in the Elementary School (3,0,3) Rhythm band and Orff instruments; review of teaching methods, review of materials in music series, methods and objectives for each grade level, KERA policies and procedures. PREREQ: consent of instructor.
mental music in public education; practicum laboratory experiences in local public schools. PREREQ: MUS 352 or consent of instructor.

MUS 342 General and Choral Music in the Secondary School (3,0,3) Organization and management of a choral/vocal program in grades 7-12; methods and materials for general music, theory, and music appreciation classes. PREREQ: MUS 352 or consent of instructor.

MUS 343 Marching Band Methods $(2,1,3)$ Practical aspects of show charting, music selection, and marching band techniques and styles; organization, discipline, and arranging. Extra class observations will require several Friday evenings. For the prospective secondary band director. Fall. PREREQ: MUS 122123.

MUS 345 Keyboard Skills I $(0,2,1)$ Developing proficiency in functional keyboard skills; sight-reading, transposition, harmonization, playing by ear, and improvisation. PREREQ: consent of instructor.

MUS 346 Keyboard Skills II $(0,2,1)$ Continued principles and techniques of sight reading, transposition, harmonization, playing by ear, and improvisation. PREREQ: MUS 345.

MUS 347 Harpsichord for Pianists II $(2,3,2)$ Advanced technique; study of renaissance, baroque, and pre classical repertoire; performance practices; figured bass. Limit four per class. May be repeated for credit. PREREQ: consent of instructor.

MUS 348 Piano Pedagogy I $(2,2,3)$ Preschool music programs; survey of philosophies and observation of teaching methods such as Suzuki, Orff, Dalcroze, Kodaly, Kindermusik, and Musikgarten. PREREQ: consent of instructor.

MUS 349 Piano Pedagogy II $(2,2,3)$ Elementary level; continuation of philosophies and methods as applied to primary grade children; early keyboard technique; musicianship; survey of teaching materials and music appropriate to this age level; business procedures for the independent music studio. PREREQ: consent of instructor.

MUS 352 Conducting I $(1,2,2)$ Introduction to the craft of conducting. Beat patterns, left hand, entrances, releases, dynamics, terminology, styles of articulation, and baton technique. Instrumental and choral music. PREREQ: MUS 223 or consent of instructor.

MUS 353 Conducting II $(3,0,3)$ Continued refinement of skills developed in MUS 352; score study techniques, terminology, and transposition. PREREQ: MUS 352 or consent of instructor.

MUS 354 Lyric Diction I $(3,0,3)$ A phonetic study of English, Latin, and Italian as utilized by the singer. Readings and performances of song lyrics. PREREQ: MUS 123, 127, and 4 semester hours of MUS 187.

MUS 355 Lyric Diction II $(3,0,3)$ A phonetic study of German and French as utilized by the singer. Readings and performances of song lyrics. PREREQ: MUS 354.

MUS 368-389 Applied Music (1-2 sem. hrs. each) Private instruction in harpsichord, harp, voice, piano, piano accompanying, organ, guitar, and band, and orchestral instruments. Open to students majoring or minoring in music; to other students by permission of music chair. May be repeated for credit. $1 / 2 \mathrm{hr}$. contact $=1$ semester hours; and 1 contact hour $=2$ semester hours. Fees assessed according to contact hours. PREREQ: placement test.

MUS 394 Special Topics: Music $(3,0,3)$ In-depth study of specialized topics in music. May be repeated for credit up to 9 semester hours when topics vary. PREREQ: junior standing or consent of instructor.

MUS 397 Junior Recital $(0,0,0)$ Students majoring in applied music and music education must give a one half hour junior recital prior to graduation. A recital jury audition must be passed at least one month prior to the public performance. PREREQ: consent of instructor.

MUS 399 Independent Study: Music (1-3 sem. hrs.) Individual creative or research projects; projects, directed by members of the faculty, must be

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approved before registration. May be repeated for credit. PREREQ: consent of instructor.

MUS 424 Jazz Pedagogy 2,0,2) An in depth study of the techniques, processes, and management of a jazz program in the school setting. PREREQ: MUS 339.

MUS 426 Jazz Styles and Analysis (3,0,3) Capstone course utilizing information from previous courses to better understand the social, musical, and cultural implications of jazz. PREREQ: MUS 238, 322, 339, and 8 semester hours of applied music.

MUS 428 Applied Composition V (1-2 sem. hrs. each) Private or semi-private instruction in music composition. May be repeated for credit. 1/2 contact hour=1 sem. hr.; 1 contact hour $=2$ sem. hrs. Fees assessed according to contact hours. PREREQ: MUS 329.

MUS 429 Applied Composition VI (1-2 sem. hrs. each) Private or semi-private instruction in music composition. May be repeated for credit. 1/2 contact hour=1 sem. hr.; 1 contact hour $=2$ sem. hrs. Fees assessed according to contact hours. PREREQ: MUS 428.

MUS 446 Vocal Pedagogy ( $3,0,3$ ) Directed readings, discussions and evaluations of vocal pedagogical philosophies; studies of the teaching materials and physical and psychological problems in the teaching of voice; observation of voice lessons and supervised teaching. PREREQ: consent of instructor.

MUS 447 Seminar in Piano Pedagogy $(3,0,3)$ Techniques of major pedagogical philosophies; studies (etudes), methods, exercises, and piano literature as applied to development in piano instruction and performance. PREREQ: consent of instructor.

MUS 448 Piano Pedagogy III $(2,2,3)$ Intermediate level; teaching teens and adults; creative practicing; piano technique; survey of materials and literature appropriate for this level; business procedures for the independent music studio. PREREQ: consent of instructor.

MUS 449 Piano Pedagogy IV $(2,2,3)$ Advanced level; repertoire; philosophies of schools of piano playing; treat pianists and their teaching; productive practicing; performance practices; literature and materials appropriate to this level; business procedures for the independent music studio. PREREQ: consent of instructor.

MUS 468-489 Applied Music (1-2 seem. hrs. each) Private instruction in harpsichord, harp, voice, piano, piano accompanying, organ, guitar, and band, and orchestral instruments. Open to students majoring or minoring in music; to other students by permission of music chair. May be repeated for credit. $1 / 2 \mathrm{hr}$. contact $=1$ semester hours; and 1 contact hour $=2$ semester hours. Fees assessed according to contact hours. PREREQ: placement test.

MUS 497 Senior Recital $(0,0,0)$ Students majoring in applied music must give a one hour senior recital prior to graduation. A recital jury audition must be passed at least one month prior to the public performance. PREREQ: consent of instructor.

MUS 499 Independent Study: Music (1-3 sem. hrs.) Individual creative or research projects; projects, directed by members of the faculty, must be approved before

## Neuroscience

NEU
NEU 493 Cognitive Neuroscience Seminar $(1,0,1)$ Serves as a capstone experience for students in the neuroscience minor. Readings and discussions directed at large-scale issues in neuroscience, typically achieved through review of the current literature. Intended to stimulate critical thinking and integration of material learned in earlier courses in the neuroscience minor. PREREQ: PSY 311 or consent of instructor.

## Nursing Registered Professional NRP

NRP 275 Race, Gender, and Health Issues $(3,0,3)$ Influences of race and gender on health status, health care, and health professions; past and present social, political, and economic factors. A general education course (race/gender). PREREQ: None.

NRP 316L Evaluation of Clinical Performance $(0,12,4)$ Demonstration of cognitive and technical skills in provision of client care under supervision of faculty; use of nursing process as a framework for client care across developmental levels in various settings. PREREQ: admission to RN-BSN program. COREQ: NRP 317L and NRP 401.

NRP 317L Decision Making in Nursing ( $0,12,4$ ) Demonstration of cognitive and critical thinking skills in making decisions in standardized clinical CAI situations; use of nursing process as a decision making framework. PREREQ: admission to RN-BSN program. COREQ: NRP 316L and NRP 401.

NRP 333 Integrative Health Therapies $(3,0,3)$ Theory, research, and risks and benefits of integrative health therapies. PREREQ: junior standing.

NRP 399 Independent Study: Nursing (1-3 sem. hrs.) Individual readings, research, and/or projects relating to professional nursing practice and developed by students in consultation with faculty prior to registration; written agreement to include purpose, objectives, instructional activities, time frame, and evaluation method. Not intended to substitute for any course offered on a regular basis. PREREQ: consent of instructor and program director prior to registration.

NRP 401 Theories and Concepts of Professional Nursing (2,0,2) Concepts and theories providing the foundation for development of the advanced professional nursing role; relationships between client, nurse, health, and environment to foster congruent role behavior of the registered nurse student and advanced professional nursing practice. PREREQ: admission to RN/BSN program. PREREQ: NRP 316L and NRP 317L.

NRP 410 Nursing Research $(3,0,3)$ Overview of the research process in nursing; historical development of nursing research; role of research in scientific advancement nursing; development of ability to critique clinical nursing research studies. PREREQ or COREQ: NRP 401. PREREQ: STA 205.

NRP 411 Holistic Nursing Assessment (2,0,2) Principles of holistic health assessment of existing and potential client problems with a view toward planning nursing care. PREREQ or COREQ: NRP 401 and NRP 410. COREQ: NRP 413L and NRP 415L.

NRP 413L Nursing Assessment Laboratory ( $0,2,1$ ) Application of holistic health assessment techniques in the laboratory setting. COREQ: NRP 411 and NRP 415L.

NRP 415L Nursing Assessment Practicum (0,4,2) Application of nursing history and physical assessment techniques in formulating nursing diagnosis for individual clients in a variety of settings. COREQ: NRP 411 and NRP 413L.

NRP 434 Theories in Nursing $(3,0,3)$ Study of the nature of theory development in nursing with emphasis on the evolution of the science of nursing. Evaluation of selected nursing theories as they relate to professional nursing practice. PREREQ: NRP 401 and NRP 410 or permission of program director.

NRP 435 Introduction to Community Health Nursing (3,0,3) Principles of health maintenance, health promotion in community settings; epidemiology, health education, group process, cultural diversity impact on health, contemporary community health problems, policy issues. PREREQ: NRP 401, NRP410, NRP 411, NRP 413L, and NRP 415L; COREQ: NRP 435L

NRP 435L Community Health Practicum $(0,12,6)$ A variety of community agencies serving a diverse population and defined risk groups; teaching, screening, case finding, referral, and evaluation of community health services. COREQ: NRP 435.

NRP 441 Nursing Leadership $(3,0,3)$ Nursing leadership concepts and functions in nursing environments; selected theories of leadership and management; collaboration for decision making and effecting change for experienced nurses. PREREQ: NRP 401, 410, 411, 413L, 415L, 434 and NRP 435/435L. COREQ: NRP 441L.

NRP 441L Nursing Leadership Practicum $(0,12,6)$ Integration of didactic content in a practice setting for experienced nurses; clinical experience in a selected healthcare agency in a leadership role with an approved preceptor. PREREQ: NRP 401, 410, 411, 413L, 415L, 434 and NRP 435/435L. COREQ: NRP 441, NRP 455.

NRP 455 Professional and Legal Issues in Nursing Practice (3,0,3) Emerging trends in nursing education and professional nursing practice; ethical and legal parameters of nursing practice. PREREQ: NRP 401, 410, 411, 413L, 415L, 434 and NRP 435/435L. PREREQ: or COREQ: NRP 441L.

NRP 509 Curriculum Development in Nursing $(2,0,2)$ Overview of the process of curriculum development and evaluation; principles of assessment, design, planning, implementation, and evaluation; program development and outcome evaluation in various nursing education settings; differences in patient, community, continuing, and professional education. Open to Registered Nurses only.

NRP 510 Educational Foundations in Nursing (3,0,3) Principles of teaching, learning, and adult education; various nursing education setting -- classroom, clinical, staff development, and community -- and teaching methods associated with those settings; small and large group techniques described. Open to Registered Nurses only.

NRP 513 Long-Term Care Regulations $(2,0,2)$ Federal and state regulation of long-term and extended care facilities; residents' rights; licensure and reimbursement; government and non-government oversight; liability for and quality in agency operations. Open to Registered Nurses only.

NRP 514 Issues in Gerontology $(2,0,2)$ Issues of significance to nurses and health professionals responsible for care of older adults; aging theories; legal/ethical issues, administration, evaluating learning theories, care and service delivery, environment, and common health problems of older adults. Open to Registered Nurses only.

NRP 533 Integrative Health Therapies $(3,0,3)$ Theory, research, and risks and benefits of integrative health therapies.

## Nursing Baccalaureate <br> NRS

NRS 100L Skills Development Laboratory ( $0,4,2$ ) Instruction in the Nursing Learning Resource Center for development of basic and complex nursing skills through the use of computer assisted instruction, demonstration, simulations and supervised practice. COREQ: NRS 104.

NRS 104 Fundamental Medical-Surgical Nursing (3,0,3) Nursing process as a basis for nursing care; concepts and theories relevant to nursing care across the life span, scientific principles related to basic nursing care procedures. PREREQ: NUR 103, BIO 126, BIO 208/208L, PSY 100. COREQ: NUR 105, BIO 209/209L, PSY 220 or EDU 300.

NRS 105 Pharmacology $(2,0,2)$ Utilization of pharmacological principles for healthcare providers; pharmacological classifications and physiological actions. PREREQ: BIO 208/208L with at least a C, PSY 100. COREQ: NRS 104/104L, NRS 196, BIO 209/209L, PSY 220 or EDU 300.

NRS 196 Fundamental Medical-Surgical Nursing Clinical (0,4,1) Application of basic concepts and theories for direct care of patients in community, acute and long term care facilities; performance of basic nursing skills supervised by faculty. COREQ: NRS 104/104L and NRS105.

NRS 204 Intermediate Medical-Surgical Nursing I (4,0,4) Concepts and theories needed to support adaptation of clients requiring multiple nursing interventions for commonly occurring alterations in health status. PREREQ: NRS 104/ 104L, NRS 196, NRS 105, BIO 209/209L, PSY 220 or EDU 300. COREQ: NRS 205, NRS 204L, NRS 296, CHE 115/115L.

NRS 204L Skills Development Laboratory II $(0,2,1)$ Instruction in the campus laboratory for development of nursing skills through the use of computer assisted instruction, demonstration, simulations and supervised practice. COREQ: NRS 204, NRS 205.

NRS 205 Holistic Nursing Assessment (2,0,2) Principles of assessment of existing potential client problems: physical condition, psychological status, developmental level, socio-cultural-economic history with the goal of planning nursing care. PREREQ: NRS 104/104L, NRS 105, NRS 196. COREQ: NRS 205L.

NRS 206 OB-Newborn Nursing (3,0,3) Historical, cultural, spiritual, ethical, legal, developmental and biophysical data to provide basis for the nursing care in obstetric health settings. PREREQ: NRS 204/204L, NRS 205/205L. COREQ: NRS 297, NRS 298, BIO 202/202L.

NRS 207 Pediatric Nursing (3,0,3) Historical, cultural, spiritual, ethical, legal developmental and biophysical data to provide a basis for the nursing care in pediatric health settings. PREREQ: NRS 204/204L, NRS 205/205L, COREQ: NRS 298, BIO 202/202L.

NRS 296 Intermediate Medical-Surgical Clinical I $(0,8,4)$ Application of concepts and theories to nursing care for adult clients in acute care settings; complex situations requiring increased competence and critical thinking skills. PREREQ: NRS 104/104L, NRS 196, NRS 105, BIO 209/209L, PSY 220 or EDU 300. COREQ: NRS 205/205L, NRS 204/204L, CHE 115/115L.

NRS 297 OB-Newborn Nursing Clinical $(0,4,2)$ Application of concepts and theories to provide nursing care for obstetric and newborn clients. COREQ: NRS 206.

NRS 298 Pediatric Newborn Clinical $(0,8,4)$ Application of concepts and theories to support care of obstetric and pediatric clients and their families. Students will complete a clinical rotation in each specialty area. COREQ: NRS 207.

NRS 299 Independent Study Nursing (1-3,0,1-3) Individual readings, research, and/or projects relating to professional nursing practice and developed by students in consultation with faculty prior to registration; written agreement to include purpose, objectives, instructional activities, time frame, and evaluation method. Not intended to substitute for any course offered on a regular basis. Applicable for lower division credit only. PREREQ: admission to the BSN program and consent of the BSN Program Director.

NRS 304 Intermediate Medical-Surgical Nursing $(3,0,3)$ Concepts and theories to support the care of adult clients requiring multiple advanced nursing interventions. PREREQ: NRS 206/297, NRS 207/298, BIO 202/202L, COREQ: NRS 396/305, NRS 332.

NRS 305 Psychiatric Nursing $(3,0,3)$ Concepts and theories to support nursing care of clients with mental health problems and disorders.

NRS 306 Advanced Medical-Surgical Nursing $(3,0,3)$ Theories and concepts for nursing practice in a critical care setting, economic and legal/ethical issues. PREREQ: NRS 304/305, NRS 325, NRS 332, NRS 396. COREQ: NRS 321, NRS 398.

NRS 321 Professional Issues $(3,0,3)$ Emerging trends in nursing education, professional nursing practice; ethical/legal parameters of nursing practice. PREREQ: NRS 206, NRS 207, NRS 296, NRS 297, NRS 298, BIO 202. COREQ: NRS 304, NRS 305, NRS 306NRS 398, NRS 396.

NRS 332 Theories in Nursing $(3,0,3)$ Study of the nature of theory development in nursing with an emphasis on the evolution of the science of nursing. Evaluation of selected nursing theories as they relate to professional nursing practice. PREREQ: NRS 206, NRS 207, NRS 297, NRS 298, BIO 202. COREQ: NRS 304, NRS 305, NRS 396, NRS 397.

NRS 396 Intermediate Medical-Surgical Nursing Clinical II (0,4,2) Application of concepts and theories to support the care of adult clients requiring multiple advanced nursing interventions. COREQ: NRS 304 NRS 305.

NRS 397 Psychiatric Nursing Clinical ( $0,2,4$ ) Application of concepts and theories needed to support adaptation of adults with mental disorders requiring multiple advanced nursing interventions.

NRS 398 Role Transition Practicum $(0,15,4)$ Clinical practice for role of professional nurse in a supportive environment; opportunities to manage groups of patients, increase clinical competence; knowledge of issues affecting healthcare/ healthcare professionals. PREREQ: NRS 304, NRS 305, NRS 332, NRS 396. COREQ: NRS 306, NRS 321, NRS 398L.

NRS 398L Role Transition Lab \& Seminar (1,2,1) Laboratory and seminar sessions to prepare student with essential skills for NRS 398 (Role Transition)
experience with preceptor. PREREQ: NRS 304, NRS 305. COREQ: NRS 306, NRS 398.

NRS 404 Community and Public Health Nursing $(3,0,3)$ Principles of health maintenance, health promotion in community settings; epidemiology, health education, group process, cultural diversity impact on health, contemporary community health problems, policy issues. COREQ: NRS 496, NRS 421.

NRS 406 Healthcare Leadership (4,0,4) Leadership concepts and functions of leadership in healthcare environments; selected theories of leadership and management; collaboration for decision-making and effecting change. COREQ: NRS 498.

NRS 413 Aging in Today's Society $(3,0,3)$ Role of the older adult in society; promotion of health, support of continued learning, right to peaceful death. Theories of aging and ethical/legal concepts. Includes experiences with the older adult in the community, acute and long term care settings. Elective for BSN students. Open to all students. PREREQ: None

NRS 415 Nursing Informatics $(3,0,3)$ Acquisition and application of knowledge and skills from information systems and computer technology; utilization of computers in nursing practice, education and research.

NRS 421 Healthcare Research $(3,0,3)$ Overview of the research process for healthcare professions; historical development of research in healthcare; role of research in scientific advancement of healthcare; development of ability to critique clinical healthcare studies. PREREQ: or COREQ: NRP 404; COREQ: STA 205 or STA 212.

NRS 496 Community and Public Health Nursing Clinical $(0,8,4)$ Variety of community agencies serving a diversity of clients and defined risk groups; teaching, screening, case finding, and referral, evaluation of community health services. COREQ: NRS 404, NRS 421.

NRS 498 Nursing Leadership Practicum ( $0,8,4$ ) Integration of didactic content in a practice setting; clinical experience in selected health care agencies, in leadership role. PREREQ: NRS 404, NRS 496, NRS 421. COREQ: NRS 406.

NRS 499 Independent Study Nursing (1-3,0,1-3) Individual readings, research, and/or projects relating to professional nursing practice and developed by students in consultation with faculty prior to registration; written agreement to include purpose, objectives, instructional activities, time frame, and evaluation method. Not intended to substitute for any course offered on a regular basis. Applicable for upper division credit only. PREREQ: admission to the BSN program and consent of the BSN Program Director.

## Organizational Systems Technology/Business Education OST

OST 111 Word Processing Technologies $(1,2,3)$ Introduction, application, and advanced features/functions of the Microsoft Word package utilizing a hands-on approach. Application of word processing features using case or field-based projects for the organization and end-user environment. After completion of this course, students may be prepared to take the current Microsoft Office User Specialist (MOUS) exam for Microsoft Word. Basic keyboarding skill assumed; outside laboratory time required. PREREQ: Keyboarding Skill.

OST 214 Spreadsheet Technologies (1,2,3) Introduction, application, and advanced features/functions for Microsoft Excel utilizing a hands-on approach. Application of spreadsheet features using case or field-based projects for the organization and end-user environments. After completion of this course, students may be prepared to take the current MOUS exam for Microsoft Excel. Outside time required. PREREQ: OST 111 or equivalent.

OST 300 Organizational and End-User Systems Concepts (3,0,3) An overview of organizational end-user systems technologies, business processes, and worker performance. This course emphasizes methods to plan for and implement information technologies in the workplace. Advances in information systems hardware, software and appropriate applications are discussed. Emphasis is on understanding end-user needs and how to select systems to address them. Workflow analysis, work (re)design, organizational change, systems implementation, and management issues are covered. PREREQ: OST 111 or consent of instructor.

OST 311 Written Communication Systems $(3,0,3)$ Techniques, principles, and software for effective written business and technical communication essential to end-user information systems; letters, memoranda, e-mail; analytical, technical and informational reports; survey instruments; graphic aids and design; systems documentation; and employment documents. Recommended for students in technical fields. PREREQ: ENG 101.

OST 317 Database Technologies $(1,2,3)$ Introduction, application and advanced features/functions of Microsoft Access utilizing a hands-on approach. Application of database features using cases of field-based projects for the organization and end-user environment. After completion of this course, student may be prepared to take the current MOUS exam for Microsoft Access. Outside laboratory time required. PREREQ: Junior standing or consent of instructor.

OST 320 Communications Technologies $(3,0,3)$ A technical overview of electronic communication systems in organizations; network architectures, local area networks, communication media, hardware/software; management issues and practical applications; application of electronic communication systems to facilitate information interchange through voice, data, text and image; application of proven methodologies through case or field-based projects. PREREQ: OST 300 or consent of instructor.

OST 323 Systems Planning and Implementation (3,0,3) Planning for systems development and employee/workgroup interactions; needs assessment, productivity measures, and problem resolution within context of end user support systems; systems development and implementation processes, tactics, and strategies; application of proven methodologies through case or field-based projects. PREREQ: OST 300 or consent of instructor.

OST 324 Operating Systems Technologies $(1,2,3)$ Computer operating systems including organizing your files, personalizing your computer software environment, bringing the World Wide Web to your desktop, searching for information, working with graphics and configuring/managing/maintaining the hard/software systems utilizing a hands-on approach. Application of proven methodologies through case or field-based projects. Outside lab time required. PREREQ: OST 300 or consent of instructor.

OST 325 Electronic Publishing/Presentation Technologies (1,2,3) Introduction, application, and advanced features/functions of Page Maker and Microsoft PowerPoint utilizing a hands-on approach. Application of desktop publishing and electronic presentation features using cases or field based projects for the organization and end-user environment. After completion of this course, student may be prepared to take the current MOUS exam for Microsoft PowerPoint. Outside laboratory time required. PREREQ: Junior standing or consent of instructor.

OST 326 End-User Technology Solutions $(3,0,3)$ This course provides a comprehensive overview of technology solutions for the organizational and end-user environment, including software packages, operating systems, and hardware considerations. Students will analyze, select and evaluate computer software and hardware to address business needs. The course emphasizes the development of business applications using software packages (word processing, spreadsheets, databases, presentation graphics, project management, and desktop publishing and their accompanying documentation and help-screens). PREREQ: OST 300, OST 317, and OST 325 or consent of instructor.

OST 394 Topics: Applied Technology Systems (3,0,3) Advanced concepts and issues relative to organizational systems. Content based upon needs and interests of students, keeping in mind current technological advancements and systems management concerns. PREREQ: consent of adviser.

OST 399 Independent Studies: Applied Technology Systems (1-3,0,1-3) Individual or group study of specific components of end user systems. For advanced students seeking to study selected problems and issues. PREREQ: consent of OST adviser.

OST 421 Case Studies in Applied Technology Systems (3,0,3) A capstone course that integrates through case studies or other comprehensive capstone experience and application of concepts, theories, and skills associated with enduser support systems as they contribute to the solution of business problems/processes and the development or redesign of the solution of business problems/ processes. The course is normally taken in the student's last term before graduation. PREREQ: OST 323 and OST 326.

OST 422 Designing and Managing Organizational Training (3,0,3) Application of theories of learning and instructional design to training of employees in hightech work environments: adult learning theory; needs assessment; instructional design and strategy; technology for traditional and web-based delivery systems; implementation, evaluation, and management of training. PREREQ: junior standing or consent of instructor.

## Public Administration <br> PAD

PAD 300 Introduction to Public Administration (3,0,3) Governmental administration, primarily U.S.; development of the discipline and its methodology; organization, personnel, and budgeting problems; administrative control and accountability. PREREQ: junior standing.

PAD 401 Human Resource Management $(3,0,3)$ Principles and problems of recruitment, examination procedures, rating, classification, and assignment to the job; philosophies of pay, promotion, employee motivation and discipline; formulating and administering public personnel policies; concepts and principles in selecting governmental personnel systems; American national, state, and local personnel systems. PREREQ: junior standing.

PAD 403 Public Policy $(3,0,3)$ Course introduces students to the policy making process by providing an introduction to public policy, providing and overview of the formation, implementation, quantitative and qualitative evaluation, and ethical aspects of policy making.

PAD 411 Public Budgeting and Finance (3,0,3) Treatment of budgetary techniques and application; program budgeting, zero-base budgeting; financial planning and revenue estimation techniques; tax and expenditure types; debt financing; financial reporting. PREREQ: junior standing.

PAD 412 Administrative Law $(3,0,3)$ Nature of the powers vested in administrative agencies; problems of administrative procedure; methods and extent of judicial control over administrative action. PREREQ: junior standing.

PAD 420 Managing the Not-For-Profit Organization (3,0,3) Development and characteristics of the not-for-profit organization; managerial challenges; application of relevant theories to the not-for-profit organization; organization, staffing, planning, programming, evaluating, board-staff relations; managing volunteers. PREREQ: junior standing.

PAD 455 Urban Administration (3,0,3) Public management issues and approaches in the modern city; governmental policy making and organizational structure in an urban environment; managerial processes for selecting, motivating, leading, and evaluating public employees; resources management; productivity in service delivery. PREREQ: junior standing.

PAD 460 Planning and Community Development $(3,0,3)$ Statutory and structural framework for urban planning and development; technical, social, political, and economic elements in the governmental planning process; planning theories and regulatory techniques; growth management; urban redevelopment. PREREQ: junior standing.

PAD 475 Local Government Management $(3,0,3)$ Senior seminar on politics and administration of local government, especially in Kentucky and Ohio. May be repeated twice when topics differ. PREREQ: junior standing

PAD 494 Topics: Public Administration $(3,0,3)$ Topics vary from semester to semester. See Schedule of Classes for topic and prerequisites. May be repeated. PREREQ: junior standing.

PAD 496 Internship: Public Administration (3,0,3) Supervised work experience and related seminar requirements; where possible, a directed research project may be substituted. Required for seniors majoring in public administration. PREREQ: consent of intern coordinator.

PAD 499 Readings: Public Administration (1-3 sem hrs.) Specialized topics in public administration covered through intensive readings and/or field projects; at the direction of a specific instructor. May be repeated as projects vary. PREREQ: consent of program coordinator.

## Physical Education <br> PHE

PHE 102-122 Beginning Level Activities (0,2,1) Development of skills, knowledge, strategies, and attitudes in specific Beginning level activities. For students unskilled in the activity.

## PHE 102 Beginning Archery (0,2,1)

PHE 104 Beginning Badminton $(0,2,1)$
PHE 106 Beginning Bowling (0,2,1)

PHE 108 Beginning Conditioning ( $0,2,1$ )

PHE 110 Beginning Golf (0,2,1)
PHE 112 Beginning Gymnastics ( $0,2,1$ )
PHE 114 Beginning Karate (0,2,1)
PHE 116 Beginning Racquetball $(0,2,1)$
PHE 118 Beginning Swimming (0,2,1)
PHE 120 Beginning Tennis (0,2,1)

PHE 122 Beginning Volleyball ( $0,2,1$ )
PHE 125 Introduction to Physical Education (3,0,3) Overview of the profession; philosophy, history, and scientific areas; examination of career opportunities. Fall/Spring.

PHE 200 Concepts of Lifetime Fitness $(1,2,2)$ Health related problems associated with a modern sedentary society; benefits of regular exercise; individual psychomotor and physiological developmental patterns. Fall/Spring/Summer.

PHE 205 Intro to Exercise Science and Personal Training (2,2,3) This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in personal training. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the clienttrainer relationship, conducting health and fitness assessments, and designing and implementing appropriate exercise programming. PREREQ: PHE 200, BIO 208.

PHE 208-220 Intermediate Level Activities (0,6,3) Refinement of skills, knowledge, strategies, and rules related to intermediate level performance of activities. For students already skilled at the Intermediate level in the activity.
PHE 208 Intermediate Conditioning ( $0,2,1$ )
PHE 209 Intermediate Aerobics (0,2,1)

PHE 210 Intermediate Golf (0,2,1)
PHE 214 Intermediate Karate (0,2,1)
PHE 218 Intermediate Swimming ( $0,2,1$ )

PHE 220 Intermediate Tennis (0,2,1)

PHE 230 Motor Skill and Fitness Activities for Children (1,2,3) Development of skills, knowledge, and strategies in activities developmentally appropriate for elementary physical education programs; movement concepts, fundamental motor skills, body management, rhythmic activities and dance, game skills, and physical fitness concepts and development activities. Spring

PHE 240 Performance and Analysis of Sport Skills I ( $0,4,2$ ) Development of skill performance and the ability to analyze skill performance critically; knowledge, rules, and progressions for developing motor skills; activities include soccer, volleyball, and archery. For students majoring or minoring in physical education; for others, consent of instructor required. Fall/Spring

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PHE 241 Performance and Analysis of Sport Skills II ( $0,4,2$ ) Development of skill performance and the ability to analyze skill performance critically; knowledge, rules, strategies, and progressions for developing motor skills; activities include golf, basketball, and softball. For students majoring or minoring in physical education; for others, consent of instructor required. Fall/Spring

PHE 242 Performance and Analysis of Sport Skills III ( $0,4,2$ ) Development of motor skill performance and the ability to analyze skill performance critically; knowledge, rules, and progression for developing motor skills; activities include track and field, badminton, and tennis. For students majoring and minoring in physical education; for others, consent of instructor required. Fall/Spring

PHE 243 Gymnastics for Teachers $(0,4,2)$ Development of the ability to perform, spot, and critically analyze the skill performance of others and to identify appropriate progressions and learning activities to safely and successfully teach gymnastics (tumbling and apparatus) in a K-12 school recreational setting. For students majoring in physical education; for others, consent of instructor required. Fall

PHE 244 Swimming and Aquatic Activities ( $0,2,1$ ) Knowledge and skills in basic water safety awareness; development of basic swimming strokes and other entry level skills for lifesaving; aquatic games and aerobic water activities. For students majoring or minoring in physical education; for others, consent of instructor required. Spring

PHE 245 Officiating Basketball (1,1,1) Rules and techniques for officiating sports contacts.

PHE 250 Physical Education for Elementary Teachers (2,0,2) Content and skills for developing, implementing, and evaluating physical education in the P5 classroom. PREREQ: admission to P-5 program or consent of instructor. Fall/ Summer/Spring

PHE 260 Principles of Strength Training ( $3,0,3$ ) Principles, theory and techniques of strength training are presented with opportunities for direct and personal application and practice.

PHE 261 Computer Applications for Health and Exercise Science $(1,2,2)$ The study and applications of technology and software that are used in the health/ wellness promotion, fitness, and exercise science professions.

PHE 265 Group Exercise Leadership $(1,2,2)$ The purpose of this course is to provide the students with knowledge and practical skills required to lead dynamic, safe, effective, and appropriate group exercise classes. Students will be introduced to the most common and current group exercise modalities, guidelines, and leadership skills. The exercise modalities will involve those used for the development and maintenance of flexibility, cardio-respiratory endurance, and muscular strength and endurance (i.e., high/low impact aerobic exercise, step training, kickboxing, water exercise, and others. PREREQ: PHE 200. COREQ: PHE 205 and PHE 290.

PHE 280 Introduction to Athletic Training (3,0,3) An introduction to athletic training/sports medicine concepts. Course content will include basic skills for prevention, assessment, and care of injuries associated with physical activity.

PHE 290 Clinical Field Experience in Exercise Science (0,2,1) A field based clinical practicum experience in which students are placed in a variety of physical activity/exercise/wellness sites to observe the potential professional career opportunities that are available to them in the field of exercise science. PREREQ: PHE 125, PHE 200. COREQ: HEA 135.

PHE 299 Special Topics in Physical Education (1-3 sem. hrs.) Directed readings, independent research, or other areas of specific or individual academic interest. Not intended to substitute for any course offered on a regular basis. Written agreement between faculty and student must be submitted to department chair within first two weeks of semester; elements of agreement to include purpose, objective, instructional activities, time frame, and evaluation procedure. PREREQ: sophomore standing and/or consent of instructor.

PHE 315 Sports Medicine I $(3,0,3)$ Introduction to sports medicine; prevention, treatment, and rehabilitation of sports injuries; ethical standards, conditioning, taping, preliminary diagnoses; rehabilitative modalities. PREREQ: HEA/PHE 135 or first aid certification. Fall

PHE 316 Sports Medicine II $(3,0,3)$ Continuation of PHE 315; advanced training in preventing, diagnosing, and treating athletic injuries; relationships with coaching, medical, and physical therapy personnel. PREREQ: PHE 315. Spring

PHE 318 Lifeguarding $(1,2,2)$ Knowledge and skills designed to save own life or life of another person in event of aquatic emergency; CPR (enhanced first aid instruction) for the professional rescuer. American Red Cross certification awarded to students meeting requirements. PREREQ: swimming proficiency test given during first class meeting. Spring

PHE 319 Water Safety Instructor (2,2,3) Knowledge, skills, and methodology necessary to teach swimming and water safety skills. American Red Cross Certification for water safety instructor, and first aid/CPR awarded to those students who meet requirements. PREREQ: must pass American Red Cross Level 4 swimming skills test. Fall/Spring

PHE 320 Motor Learning and Performance $(2,2,3)$ This course is designed to examine the principles of motor learning by examining the physiological, psychological, and neuromotor factors that affect the acquisition and performance of motor skills. PREREQ: PHE 125.

PHE 330 Motor Development $(3,1,3)$ Motor development from birth through maturity; factors influencing the development and performance of motor skills; application of assessment and intervention strategies to improve motor performance for preschoolers through the elderly. Includes 5-7 hours of an on-campus intervention clinical experience with preschool children. PREREQ: Junior standing. Fall/Spring

PHE 340 Physiology of Exercise $(3,1,4)$ Response of the body to muscular activity; structure and function of skeletal muscles; energy sources and oxygen requirements for muscular activity. Fall. PREREQ: BIO 208, PHE 205. Fall/ Spring

PHE 342 Introduction to Health Appraisal and Fitness Assessment (1,2,2) The purpose of this course is to teach the students the theory and practice for developing skills in assessing health-related physical fitness and provide guidelines for standard step-by-step assessment procedures. PREREQ: PHE 200, PHE 205. COREQ: PHE 390, PHE 340.

PHE 345 Physical Activity and Aging ( $3,0,3$ ) The purpose of this course is to examine the physical dimensions of older adults. This will include basic concepts of the aging adult; energy work and efficiency; motor control, coordination and skill; physical-phychosocial relationships; and, physical performance and achievement. PREREQ: PHE 440, PHE 390. COREQ: PHE 205, PHE 330.

PHE 350 Psychology of Physical Activity (3,0,3) This course focuses on the evi-dence-based literature which describes populations that are and are not physically active; research based theories that explain reasons that people are and are not physically active; successful motivational strategies; and the evaluation and applications of interventions designed to change inactive behavior or to sustain physically active behavior. PREREQ: PHE 200, PSY 100.

PHE 360 Statistics and Measurement in Physical Education (3,0,3) Designed to provide knowledge and practical experience in the study of statistical techniques, motor ability tests, motor fitness tests, physical fitness tests, and skill tests applicable to physical education. Fall. PREREQ: MAT 099 or acceptable placement score. Fall/Spring

PHE 365 Exercise Programming for Older Adults $(1,2,2)$ Topics include special programming, leadership, and risk management principles which are appropriate for the wide variety of abilities and health status of older adults. Class content is based on American College of Sports Medicine Health Instructor Certification Standards (ACSM), and the International Curriculum Guidelines for Preparing Physical Activity Instructors of older Adults (ISAPA). PREREQ: PHE 340, PHE 345. COREQ: PHE 350, PHE 391.

PHE 370 Biomechanics $(3,0,3)$ Mechanics of human motion with respect to performance in sport activities and movement analysis. Spring. PREREQ: BIO 208. Fall/Spring

PHE 385 Sociological and Psychological Dimensions of Sport and Physical Activity ( $3,0,3$ ) Introduction of social psychological theory and principles applied to sports; analysis of sport from a sociological perspective through study
of values, norms, and behavior of sport in American society. PREREQ: PHE 125. Fall

PHE 390 Fitness Assessment Practicum I (0,2,1) Students will demonstrate health/fitness assessment skills and provide assistance to patrons in the Campus Recreation Center Fitness Program as a personal trainer under staff/faculty supervision and to develop skills in educational media development and fitness programming. PREREQ: PHE 205, PHE 200, PHE 290, PHE 261, HEA 160. COREQ: PHE 342.

PHE 391 Fitness Assessment and Exercise Leadership Practicum II (0,4,2) A clinical practicum experience in which students are placed in an older adult fitness/wellness center. The practicum student will assist with the administration of assessments, and assist clients in the exercise setting with appropriate exercises, and assist clients in proper use of exercise equipment. Students will also assist the Wellness Program staff with instructional media projects and other management duties as assigned. PREREQ: PHE 390, 342, 345. COREQ: PHE 365.

PHE 392 Practicum in Fitness Assessment $(0,10,3)$ Practical experiences in assessing physical fitness, both on campus and in the community. Fall/Spring

PHE 430 Curriculum and Methods for Teaching Elementary Physical Education $(2,1,3)$ Development of knowledge, teaching skills, and strategies necessary for effective teaching of physical education in grades K-5. PREREQ: PHE 230, PHE 330, EDU 300, and admission to teacher education program. COREQ: PHE 490. Fall

PHE 450 Organization and Administration of Physical Education, Recreation, and Athletics $(3,0,3)$ Theory, policies, and procedures for administering physical education, recreation, and athletic programs in the school and community; program development, budgeting, equipment, facilities, personnel. Fall.

PHE 465 Exercise Prescription $(3,1,4)$ Principles and applications for prescribing exercise and physical activities for a variety of populations to improve healthrelated physical fitness and/or athletic performance. PREREQ: PHE 360 and PHE 340. Fall

PHE 480 Curriculum and Methods for Teaching Middle School and Secondary Physical Education $(2,1,3)$ Development of knowledge, teaching skills, and strategies necessary for effective teaching of physical education in the middle and secondary school. PREREQ: PHE 200, PHE 240, PHE 241, PHE 242, and admission to teacher education program. COREQ: PHE 491. Spring

PHE 490 Practicum in Teaching Elementary Physical Education (0,1,1) Supervised practice teaching experience in an elementary school setting. Integrated with methods course. COREQ: PHE 430. Fall

PHE 491 Practicum in Teaching Middle School and Secondary Physical Education ( $0,1,1$ ) Supervised practice teaching experience in a middle school and/or high school setting. Integrated with methods course. COREQ: PHE 480. Spring

PHE 492 Exercise Leader Practicum III ( $(0,2,2)$ A field based clinical practicum experience in which students are placed in 1 or 2 physical activity/exercise/wellness sites as a fitness/exercise leader under the supervision of a site professional. The practicum student will assess, assist, and design and exercise prescription for two clients at the site, as well as, work individually assisting other clients, and will lead an exercise group in the setting. PREREQ: PHE 391, PHE 265. COREQ: PHE 465, PHE 498.

PHE 496 Field Experience in Recreation/Fitness $(0,15,5)$ Full semester field experience in community setting; experience in planning, observation, and implementation of recreation or fitness programs under supervision of qualified professional. PREREQ: consent of director of physical education programs. COREQ: PHE 498. Fall/Spring

PHE 498 Research, Trends, and Issues in Exercise Science (2,0,2) This course will focus on an introduction to the various techniques of research in exercise science. The course will expose the student to the basic concepts of exercise science research via the production of a research paper and other assigned tasks. Emphasis will be placed on the skills necessary to allow the student to become an improved consumer of research in the field of exercise science.

PHE 499 Special Topic in Physical Education (1-3 sem. hrs.) Directed readings, independent research, or other areas of specific or individual academic interest. Not intended to substitute for any course offered on a regular basis. Written agreement between faculty and student must be submitted to department chair within first two weeks of semester; elements of agreement to include purpose, objective, instructional activities, time frame, and evaluation procedure. PREREQ: junior or senior standing and/or consent of instructor.

PHE 500 Adapted Physical Education (3,0,3) Adaptation of physical education programs for temporarily or permanently handicapped persons. Fall/Spring

PHE 545 Sport in Modern America (3,0,3) Trends and problems in organized athletic competition in the context of contemporary society. Summer

PHE 595 Scientific Foundations of Coaching (3,0,3) Scientifically based principles applied to effective athletic coaching; exercise physiology, biomechanics, kinesiology, and sport psychology. Summer

PHE 599 Selected Problems in Physical Education (1-3 sem. hrs.) Individual or group study of a topic of current interest in physical education. Topic selected by student with approval of instructor.

## Philosophy <br> PHI

PHI 150 Introduction to Philosophy (3,0,3) Application of philosophical thinking to perennial human concerns; human nature and the human condition, the good life, the good society. A general education course (humanities).

PHI 150H Honors Introduction to Philosophy (3,0,3) Application of philosophical thinking to perennial human concerns; human nature and the human condition, the good life, the good society. A general education course (humanities).

PHI 155 Introduction to Ethics (3,0,3) Moral dimension of human experience; development of a rational approach to ethical inquiry; major value questions and ethical issues. A general education course (humanities).

PHI 160 World Religions $(3,0,3)$ A philosophical and comparative analysis of the major world religions: Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. A general education course (humanities or non-western perspective).

PHI 165 Introduction to Logic (3,0,3) Methods and principles used to distinguish valid from invalid forms of argumentation in deductive and inductive reasoning; syllogisms, dilemmas, truth tables, and the scientific method. A general education course (humanities).

PHI 170 Philosophy and Sexuality ( $3,0,3$ ) Differing analyses of sexuality, love, and friendship, including historical perspectives such as Greek, Christian, Marxist, Freudian, Feminist, Existentialist, and Contemporary Analytic; contemporary discussions concerning sexism, male chauvinism, marriage, polygamy, homosexuality, lesbianism, androgyny, pornography, and prostitution. A general education course (humanities).

PHI 180 History of Classical and Medieval Philosophy (3,0,3) Western philosophical tradition from the Greeks to the 15th century; birth of scientific explanations; the role of reason; impact of Christianity; influence of seminal thinkers such as Socrates, Plato, Aristotle, the Atomists, Augustine, and Aquinas on political, ethical, religious, and other ideas. A general education course (history or humanities/).

PHI 185 History of Modern and Contemporary Philosophy (3,0,3) Western philosophical tradition from the 15th to the 20th century; rise of rationalism, dualism, empiricism, idealism, skepticism, and utilitarianism, and the modern reactions to them, such as positivism, dialectical materialism, existentialism, and feminism; figures such as Bacon, Descartes, Hobbes, Leibniz, Spinoza, Hume, Mill, Kant, Hegel, and others. A general education course (history or humanities).

PHI 201 Ideas in Philosophy $(3,0,3)$ Issues and/or works in philosophy revolving around a selected theme or concern. May be repeated as topics vary. A general education course (humanities).

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PHI 210 Ethics of Information Technology (3,0,3) Ethical issues faced by computing professionals including those related to computing in the workplace, security, crime, privacy, property rights, risk, liability, and the internet. A general education course (humanities) PREREQ: None.

PHI 220 Health Care Ethics $(3,0,3)$ Ethical decision making and problems of contemporary health care; abortion, euthanasia, population and behavior control; informed consent and counseling; professional codes and personal freedom; mental health and personal autonomy; justice and equality in health care; ethical conflicts in health service work; death and dying. A general education course (humanities).

PHI 230 Environment, Technology, and Human Values (3,0,3) Technology and human nature; ethical implications of present and future technological developments; application of ethical frameworks to the problems of human beings in the future; ecological and environmental values; western and non-western approaches.

PHI 240 Philosophy and the Arts $(3,0,3)$ Differing theories of the nature and importance of art in the history of aesthetics in regard to the artist, to the audience, to society; form and content within various media; the art world; artistic creativity and truth; imagination, emotion, unconscious, intellect and the artistic process; craft and art; feminist and Marxist critiques of art. A general education course (humanities)

PHI 250 Eastern Philosophy ( $3,0,3$ ) Philosophical foundations of Buddhism, Taoism, Confucianism, and Hinduism, including perspectives on self, reality, community, language, truth, enlightenment, embodiment, reason, emotion, and art; contrast with western perspectives; meditation and applied meditative practices. A general education course (humanities or non-western perspective).

PHI 301 Philosophy in Literature (3,0,3) Philosophical issues in literature considered historically and/or thematically; reality, nature, self, creativity, language, knowledge, community, good and evil, freedom, and God.

PHI 302 Ethics and Science ( $3,0,3$ ) Ethical, legal, and public policy issues stemming from scientific research, including medical, psychological, and sociological; topics may include animal and human experimentation, informed consent, privacy, confidentiality, government regulations, freedom of inquiry and censorship, the moral responsibility of scientists, the implications of scientific research for ethics. PREREQ: 3 semester hours in philosophy.

PHI 303 Philosophy and Psychotherapy ( $3,0,3$ ) Philosophical frameworks of underlying assumptions about reality, self, time, meaning, rationality, imagination, emotion, society, unconsciousness, embodiment, and therapeutic process in various psychotherapeutic modalities, such as Freudian, Jungian, Medical Model, Existential, Logotherapeutic, Gestalt, and Behaviorist; ethical issues of practice; social issues. PREREQ: 3 semester hours of philosophy.

PHI 304 Zen $(3,0,3)$ The course offers foundational and developmental exposure to the fundamental and essential teachings of Zen from the stand point of both philosophy and religion as well as a non-sectariam practice in mindfulness training. PREREQ: 3 semester hours of philosophy.

PHI 305 Existentialism (3,0,3) Meaning, freedom, responsibility, communication, creativity, and value in the works of thinkers such as Kierkegaard, Nietzsche, Heidegger, Sartre, Camus, DeBeauvoir, and others; critique of traditional notions of mind versus body, reason, truth, self-identity, language, and time.

PHI 306 Philosophy and Science ( $3,0,3$ ) Philosophical issues in science; the nature of scientific explanation; science and pseudoscience; growth of scientific knowledge; Kuhn, Popper, Feyerabend, and others. PREREQ: 3 semester hours in philosophy or science.

PHI 307 Business Ethics ( $3,0,3$ ) Codes by which businesses and individuals in business act; problems that can develop concerning ethical issues; corporate personhood; corporate, employer, employee, and consumer rights and responsibilities. PREREQ: 3 semester hours in philosophy.

PHI 311 Philosophy of Women $(3,0,3)$ Ideas of and about women in the history of philosophy; perennial issues that have emerged from classical times to the present. PREREQ: 3 semester hours in philosophy or women's studies.

PHI 315 Knowledge and Reality (3,0,3) Differing views on the nature of knowledge and reality, e.g., analytic, idealist, realist, materialist, existentialist, mystical, intuitionist, and emotivist; relevance of these theories to one's personal philosophy of life and actions; nature of language, perception, intellection, time, matter, mind, God, freedom, truth, reason, emotion. PREREQ: 3 semester hours in philosophy.

PHI 320 Social and Political Philosophy $(3,0,3)$ Nature and purposes of the state, grounds of political obligation, freedom and its limitations, human rights, social justice, and selected contemporary issues.

PHI 322 Philosophy of Race $(3,0,3)$ Examination of the concept of race and the way race informs identities. Topics include the reality of race, the origins of the concept; definition of racism and its reality in contemporary America; the intersection of race and gender; race and health care; politics of difference and recognition; racial justice. PREREQ: sophomore standing. A general education course (race/gender).

PHI 323 Peace and War $(3,0,3)$ Philosophical study of main issues related to the ideas and realities of war and peace. Topics will include beliefs and theories about peace and war, the causes of violence and war, war and morality, alternatives to violence and war, peace ideas and proposals, applications to current world conditions. PREREQ: 3 semester hours in philosophy.

PHI 324 Africana Philosophy $(3,0,3)$ Examination of cultural ideologies and traditions that unite and differentiate people of African descent. Issues discussed include slavery and colonization; mysticism, magic, witchcraft, African medicine and science; race, racism, ethnicity and identity; black power, racial justice, Afrocentricism, and Afro-feminism. A general education course (race/gender). PREREQ: sophomore standing.

PHI 323 Peace and War $(3,0,3)$ Philosophical study of main issues related to the ideas and realities of war and peace. Topics will include beliefs and theories about peace and war, the causes of violence and war, war and morality, alternatives to violence and war, peace ideas and proposals, applications to current world conditions. PREREQ: 3 semester hours in philosophy.

PHI 325 Philosophy of Nonviolence (3,0,3) Reflective and evaluative study of the theory and practice of nonviolence. Topics will include the origins of nonviolence in both Western and Eastern thought; modern philosophers of nonvio-lence--Tolstoy, Gandhi, and King; civil disobedience; types of pacifism; women and nonviolence; recent examples of nonviolent action. PREREQ: 3 semester hours in philosophy.

PHI 330 Philosophy and Law $(3,0,3)$ Major philosophical issues in law; theories of the nature and purposes of law, legal enforcement of community standards, strict liability, human rights, civil disobedience, theories of punishment, and legal ethics. PREREQ: sophomore standing. A general education course (humanities).

PHI 335 Great Traditions in Ethics (3,0,3) In-depth study of the major sources of western moral philosophy; representative selections from philosophers of classical times to the present (e.g., Plato, Aristotle, Augustine, Aquinas, Kant, Bentham, Mill, Marx, Dewey, and Sartre). PREREQ: 3 semester hours in philosophy.

PHI 340 Contemporary Anglo-American Philosophy (3,0,3) Central issues and themes in 20th century Anglo-American philosophy, Russell, Wittgenstein, Quine, and others; language, truth and meaning, free will and determinism, and relation of mind and body. PREREQ: 3 semester hours in philosophy.

PHI 345 Philosophy of Mind $(3,0,3)$ This course is designed to examine issues and themes in contemporary philosophy of mind; the relationships among the mind, brain and world; problems concerning intentionality, subjectivity, consciousness, qualia, mental representation, mental causation; and the intersection of psychology, cognitive science, neuroscience, and artificial intelligence with philosophy. PREREQ: 3 semester hours in philosophy.

PHI 348 Darwin and Philosophy $(3,0,3)$ In this course we examine neo-Darwinian views on evolution and natural selection. We consider several attempts to use evolutionary principles to provide naturalistic explanations for important features of human existence, like the nature of thought, morality, freewill, creativity and the effects of culture. PREREQ: 3 hours of philosophy.

PHI 350 Philosophy of Religion $(3,0,3)$ Issues in religious philosophy, including the relation between faith and reason, the nature of religious experience, arguments for the existence of God, the problem of evil, and immortality. PREREQ: sophomore standing or consent of instructor. A general education course (humanities).

PHI 355 Socrates \& Plato $(3,0,3)$ Study of two major formative persons in the development of Western thought and culture. Socrates’ life, trial, death, thought, and significance. Plato on the good, justice, education, knowledge, and reality; the Platonic tradition. PREREQ: 3 semester hours in philosophy.

PHI 360 Topics in Environmental Philosophy (3,0,3) In-depth examination of a selected topic in environmental philosophy, such as environmental feminism, animal rights, technology and human nature, environmental justice, or religion and ecology. Topic will be announced in the Schedule of Classes. May be repeated as topics vary. PREREQ: 3 semester hours in philosophy or consent of instructor.

PHI 370 Ethics and the Nursing Profession (3,0,3) Ethical, legal, and social ramifications regarding the nurse's role and nursing's professional codes; moral and legal dilemmas of the nurse in relation to the patient, to the institution, to other health care providers, and to personal moral and religious concerns. PREREQ: PHI 220

PHI 394 Topics: Philosophy (3,0,3) In-depth examination of a major figure, issue, or school in philosophy. Topic will be announced in Schedule of Classes. May be repeated as topics vary. PREREQ: 3 semester hours in philosophy.

PHI 396 Applied Philosophy Internship $(2,5,3)$ Supervised readings and research carried out in conjunction with practicum, internship, or job in student's primary area of interest; focus upon philosophical and ethical issues of the work experience. PREREQ: 6 semester hours in philosophy and consent of instructor.

PHI 494 Seminar: Philosophy $(3,0,3)$ Examination of a selected problem or tradition in philosophy. Offered according to demand and interest of students at discretion of philosophy faculty. May be repeated when topics vary. PREREQ: 6 semester hours in philosophy.

PHI 499 Independent Study (1-3 sem. hrs.) Individually supervised readings and study of some philosophical work, problem, or tradition. May be repeated as topics vary, but no more than twice. PREREQ: 6 semester hours in philosophy and consent of instructor.

PHI 510 Ethics of Information Technology (3,0,3) Ethical issues faced by computing professionals including those related to computing in the workplace, security, crime, privacy, property rights, risk, liability, and the internet.

PHI 511 Philosophy of Woman ( $3,0,3$ ) In-depth examination of historical and contemporary conceptions of woman's nature and the impact of those views on woman's current status in society.

PHI 560 Topics in Environmental Philosophy ( $(3,0,3)$ In-depth examination of a selected topic in environmental philosophy, such as environmental feminism, animal rights, technology and human nature, environmental justice, or religion and ecology. Topic will be announced in the Schedule of Classes. May be repeated as topics vary. PREREQ: Graduate standing.

PHI 594 Topics: Philosophy $(3,0,3)$ In-depth examination of a selected topic in philosophy. May be repeated as topics vary. PREREQ: 6 semester hours in philosophy or consent of instructor.

PHI 599 Independent Study (3,0,3) Individually supervised readings and study of a selected study in philosophy. May be repeated as topics vary. PREREQ: 6 semester hours of philosophy or consent of instructor.

## Physics <br> PHY

PHY 100 Science, Engineering, and Design (1,0,1) Course designed for students who wish to pursue a course of study in a field of science or pre-engineering at NKU. Topics will include career information, career and college success skills, and an introduction to design.

PHY 101 Einstein 101 (3,0,3) Introduction to concepts in modern Physics by studying the work and life of Albert Einstein. Theories to be covered include special and general relativity, photoelectric effect, quantum mechanics, and Browian motion. Assumes knowledge of elementary algebra and graphing techniques. A general education course (natural science). PREREQ: MAH 099 or equivalent.

PHY 110 Introduction to Physics with Laboratory $(3,2,4)$ Conceptual physics for non-science majors. Using guided inquiry activities to teach basic principles and their applications. Topics chosen from among: nature of physics as a science, mechanics, wave motion, light, heat, electricity, and the atom. Assumes knowledge of elementary algebra. A general education course (natural sciences). PREREQ: MAH 099 or equivalent.

PHY 115 Physics of Music and Sound $(3,1,4)$ The course examines the physical principles involved in the description, generation, detection, and reproduction of sound. Topics include oscillations and vibrations, waves and waveforms, sound, traveling waves in air, standing waves, resonance, hearing, the ear, loudness, decibels, acoustical measurements, sound-generating electronics, digital sound. PREREQ: MAH 099. A general education course (natural science).

PHY 150 Current Topics in Physics $(3,0,3)$ Directed projects, readings, and discussion for students interested in physics as a major or a minor. Does not meet general education requirement in natural sciences.

PHY 211 General Physics with Laboratory I $(4,2,5)$ Non-calculus introduction to classical physics using guided inquiry activities. Topics include kinematics, forces and Newton's Laws of Motion, circular motion, work and energy, momentum, Rotational motion, static equilibrium, and fluids. Assumes knowledge of algebra and basic trigonometry. A general education course (natural sciences). PREREQ: MAT 119 or MAT 118 or equivalent placement.

PHY 213 General Physics with Laboratory II $(4,2,5)$ Non-calculus introduction to classical physics using guided inquiry activities. Continuation of PHY 211. topics include oscillations, waves and sound, electric forces and fields, DC circuits, magnetic forces and fields, AC circuits, geometrical optics, and physical optics. A general education course (natural sciences). PREREQ: PHY 211.

PHY 220 University Physics with Laboratory I (3,3,4) Calculus based introduction to classical physics using guided inquiry activities. Topics include techniques for data analysis, kinematics, forces and Newton's Laws of motion, circular motion, work and energy, momentum, rotational motion, static equilibrium. A general education course (natural sciences). PREREQ or COREQ: MAT 121 or MAT 129 or MAT 227.

PHY 222 University Physics with Laboratory II $(3,3,4)$ Calculus based introduction to classical electromagnetic theory using guided inquiry activities. Topics include electric forces and fields, DC circuits, magnetic forces and fields, AC circuits. A general education course (natural sciences). PREREQ: PHY 220. PREREQ or COREQ: MAT 221 or MAT 229 or MAT 228.

PHY 224 University Physics with Lab III $(3,3,4)$ Calculus based introduction to classical physics using guided inquiry activities. Topics include oscillations, waves, sound, geometrical optics, physical optics, fluids and thermodynamics. PREREQ: :PHY 220.

PHY 294 Topics: Physics (1-3 sem. hrs.) Special topics in physics. Repeatable for a maximum of 12 semester hours. PREREQ: consent of department chair.

PHY 300 Intermediate Physics Laboratory ( $0,4,2$ ) A selection of experiments in classical and modern physics. Topics include but are not limited to properties of light, quantization of charge, and atomic structure. COREQ: PHY 361.

PHY 301 Advanced Physics Laboratory $(0,4,2)$ A selection of advanced experiments in classical and modern physics. Topics are selected from thermodynamical properties of matter, nuclear structure, particle physics and advanced optics. PREREQ: PHY 300.

PHY 304 Electronics and Circuit Analysis with Laboratory (3,2,4) Electronic components and devices; DC and AC circuit analysis; analog electronics. PREREQ: PHY 222.

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PHY 305 Statics $(3,0,3)$ Force on bodies at rest; vector algebra; force systems; equivalent force systems; distributed forces; internal forces; principles of equilibrium; application to trusses, frames, and beams; friction. PREREQ: PHY 211 or PHY 220 and MAT 220.

PHY 310 Dynamics (3,0,3) Particle dynamics in one, two, and three dimensions; applications of mathematics to mechanical systems; theory of small oscillations; rigid body dynamics. PREREQ: PHY 220 and MAT 325.

PHY 315 Introduction to Astrophysics $(3,0,3)$ Quantitative application of physical principles to subjects of astronomical interest, such as the interaction of radiation with matter, analysis of stellar atmospheres, origin and evolution of the elements, and cosmology. Same as AST 315. PREREQ: PHY 222 or PHY 213 and MAT 120 or MAT 122.

PHY 320 Physical Optics $(3,0,3)$ Nature of light; interference; diffraction; polarization. PREREQ: PHY 222 and MAT 220.

PHY 330 Mathematical Physics $(3,0,3)$ Fourier series; orthogonal expansions; eigenvalue problems; boundary value problems in ordinary and partial differential equations. Same as MAT 330. PREREQ: MAT 225 and MAT 325.

PHY 340 Digital Microcomputer Electronics for Scientific Application with Laboratory I (3,2,4) Introduction to AC circuits, solid state devices, digital integrated circuits, Boolean logic, logic gates, combinational and sequential logic timing analysis; memories; $\mathrm{A} / \mathrm{D}$ and $\mathrm{D} / \mathrm{A}$ conversion with applications to interfacing scientific equipment. PREREQ: PHY 213 or PHY 222 and one of CSC 160, or CSC 260.

PHY 341 Digital and Microcomputer Electronics for Scientific Applications with Laboratory II $(3,2,4)$ Microcomputer architecture, instruction sets, and machine language programming; interfacing techniques including interrupts, I/ O ports, and PIA's; dedicated microcomputer applications; data acquisition and control of physical systems. PREREQ: PHY 304 or 340.

PHY 360 Thermodynamics $(3,0,3)$ The laws of thermodynamics applied to closed systems, open systems, power cycles and refrigeration cycles; extensive use of tables and graphs of thermodynamic properties. PREREQ: PHY 224 and MAT 320.

PHY 361 Modern Physics I $(3,0,3)$ Introduction to concepts of modern physics; relativity, quantization of charge, black body radiation, photoelectric effect, xray and Compton scattering, atomic models of Rutherford and Bohr, wave properties of matter, the Schrodinger equation and atomic physics. PREREQ: PHY 220 and PHY 224 or PHY 213 and MAT 120. COREQ: PHY 300.

PHY 392 Directed Research: Physics (1-3 sem. hrs.) Supervised research in an area of physics currently under investigation by one or more members of the physics faculty. Repeatable for a maximum of 9 semester hours. PREREQ: junior standing.

PHY 394 Topics: Physics (1-3 sem. hrs.) In-depth study of specialized topics in physics. May be repeated for credit up to 9 sem. hours when topic varies. Offered on demand. PREREQ: consent of instructor.

PHY 397 Special Projects: Physics (1-3 sem. hrs.) Completion of an independent project involving either the development of an advanced laboratory experiment or the construction of a working prototype (or detailed conceptual design) of an operational device. Repeatable for a maximum of 6 semester hours.

PHY 399 Readings: Physics (1-3 sem. hrs.) Current literature. Repeatable for a maximum of 6 semester hours.

PHY 410 Electromagnetic Theory $(4,0,4)$ Development of Maxwell's equations; their application to electrostatics, magnetostatics, and electromagnetic radiation. PREREQ: PHY 222, MAT 320, and MAT 325.

PHY 420 Modern Physics II $(3,0,3)$ Applications and advanced topics in modern physics; statistical physics, molecular structure and spectra, solid state physics, nuclear physics, particle physics and cosmology. PREREQ: PHY 361.

PHY 460 Quantum Mechanics $(3,0,3)$ Principles of quantum mechanics; operator methods and their application tot he hydrogen atom, spin, and angular momen-
tum. Other topics selected from quantum statistics, variational techniques and perturbation theory, WKB approximation, and many electron atoms. Same as CHE 560. PREREQ: PHY 361 or CHE 361 and MAT 325.

PHY 492 Undergraduate Research: Physics (1-3 sem. hrs.) Supervised research in an area of physics currently under investigation by one or more members of the physics faculty. Repeatable for a maximum of 9 semester hours. PREREQ: 8 semester hours of 300-level physics courses or above.

PHY 494 Seminar: Physics $(1,0,1)$ Techniques to search and report on research articles in physics. A written report and an oral presentation are required. PREREQ: 20 semester hours of physics courses.

## Popular Culture <br> POP

POP 205 Introduction to Popular Culture (3,0,3) Major areas of popular culture studies; values and attitudes expressed in and passed on by activities, objects and entertainment forms of popular culture. A general education course (social science).

POP 205H Honors Introduction to Popular Culture (3,0,3) Major areas of popular culture studies; values and attitudes expressed in and passed on by activities, objects and entertainment forms of popular culture. A general education course (social science).

POP 345 Japanese Popular Culture (3,0,3) Postwar Japanese society and culture; beliefs and values, gender roles, daily experience, popular and entertainment forms. PREREQ: POP 205, JPN 101. A general education course (non-western)

POP 394 Topics: Popular Culture $(3,0,3)$ Focused study of a specific and significant topic concerning popular culture. Topics vary from semester to semester. May be repeated once for credit. PREREQ: Varies according to topic.

POP 499 Independent Study (1-3 sem hrs.) Individually supervised work involving reading, research, and/or production in a specified area of interest. Topic selected before registration in conference with instructor.

## Public Relations <br> PRE

PRE 296 Public Relations Practicum $(0,1,1)$ Academically supervised and evaluated professional experience in public relations on or off campus. Repeatable for up to 6 semester hours of practicum applicable toward the major in public relations. PREREQ: PRE 375.

PRE 375 Principles of Public Relations $(3,0,3)$ Philosophy and functions of public relations practices; campaign planning and public affairs activities; writing messages for and selection of news media. PREREQ: JOU/EMB 110 and JOU 220 , or EMB 265 or consent of instructor.

PRE 376 Public Relations Writing ( $3,0,3$ ) Instruction and practice in various forms of writing for Public Relations, including press releases, annual reports, newsletters, and other professional public relations writing for the media and the public. PREREQ or COREQ: PRE 375.

PRE 377 Public Relations Case Studies and Campaigns (3,0,3) Evaluation of public relations programs conducted by companies, nonprofit institutions, and government agencies; writing for specialized and mass media in public relations. PREREQ: PRE 375.

PRE 396 Internship: Public Relations (3,0,3) Selected placement, for P.R. majors, in a public relations agency, department, or other employer of P.R. professionals. Assigned work in a business, non-profit, or government organization may include writing, production, or promotion. May not be repeated for credit. PREREQ: PRE 375; PRE 376 or JOU 371 or JOU 346.

PRE 410 Electronic Public Relations 3,0,3) Provide knowledge and practice in preparing various forms of electronic media used for corporate, non-broadcast purposes. Students will develop, create and produce effective electronic programming for distribution within the corporate culture in this course. PREREQ: JOU/EMB 110, CMST 220, and an advanced writing course (PRE 376, JOU 371, or JOU 346).

PRE 499 Independent Study: Public Relations (1-3 semester hours) Individually supervised work involving reading, research, writing, and/or production in a specified area of interest of public relations. Topic and plan of study selected before registration in conference with professor. May be repeated for a maximum of 6 semester hours. PREREQ: junior standing; approved independent study proposal.

## Prior Learning <br> PRL

PRL 101 ( $2,0,2$ ) Conversion of prior (job or personal) college level learning experience into college credit; assembling a portfolio document. PREREQ: written permission from Educational Outreach Program Director.

## Political Science PSC

PSC 100 American Politics $(3,0,3)$ National government in the U.S. decision making process, government structure, politics. A general education course (social sciences).

PSC 101 State and Local Politics (3,0,3) Policy making processes in U.S. state governments, Kentucky state and local governments. A general education course (social sciences).

PSC 102 Comparative Politics $(3,0,3)$ Analysis of political systems using the comparative approach to political processes and behavior. A general education course (social sciences or non-western perspective).

PSC 103 International Politics $(3,0,3)$ Fundamental factors governing international politics. A general education course (social sciences or non-western perspective).

PSC 103H Honors International Politics (3,0,3) Fundamental factors governing international politics. A general education course (social sciences or non-western perspective).

PSC 110 History of Western Political Thought $(3,0,3)$ Trends and ideas that have helped shape Western political heritage. A general education course (humanities or social sciences).

PSC 111 History of American Political Thought (3,0,3) Trends and ideas that have helped shape the American political heritage. A general education course (humanities or social sciences).

PSC 215 Race, Gender, and Politics $(3,0,3)$ Race, ethnicity, and gender patterns in the U.S.; race and gender issues related to law, justice, and public policy; historical antecedents of contemporary policies and practices; women and ethnic groups and their relation to cultural, economic, social, and political trends. A general education course (social sciences or race/gender).

PSC 291W Writing in Political Science $(3,0,3)$ Writing techniques used in the discipline including but not limited to research papers, reviews, briefs, position papers, policy analyses, and technical reports, professional writing processes including finding, using and citing sources; information techniques used in political science. A general studies course (Written Communications II).

PSC 302 The American Presidency (3,0,3) A comprehensive examination of the Presidency of the United States of America. This class will look at leadership styles, different time periods in presidential history, the historical impact of past presidents on current office holders and the interaction between the presidency, congress, and the supreme court. PREREQ: 3 semester hours of introductory political science courses.

PSC 303 The American Legislature (3,0,3) A comprehensive examination of the Congress of the United States of America. The focus will be how laws are made, how candidates are elected, the role of the political parties, the interactions between the Congress and the Presidency/Supreme Court, the constitutional foundations of the Congress, and the development of congressional power since the founding. PREREQ: 3 semester hours of introductory political science courses.

PSC 304 Introduction to the Law (3,0,3) Various approaches to law, including philosophical, sociological, political, and historical; elements of legal reasoning;
institutions, functions, and effects of law in American society. PREREQ: 3 semester hours of introductory political science courses.

PSC 305 The Judicial Process ( $3,0,3$ ) A systems approach to the behavior of actors in the federal judiciary. PREREQ: 3 semester hours of introductory political science courses.

PSC 307 Constitutional Law (3,0,3) Major constitutional issues studied through decisions of the Supreme Court. PREREQ: 3 semester hours of introductory political science courses.

PSC 308 Civil Liberties $(3,0,3)$ Equal protection under the law; criminal due process, First Amendment freedoms studied through case methods. PREREQ: 3 semester hours of introductory political science courses.

PSC 309 Law of Mass Communications $(3,0,3)$ Basic legal concepts and issues affecting mass communication, constitutional law, the First Amendment, libel, slander, invasion of privacy, copyright, the FCC and its regulation of broadcasting, legal access to the media, and the use of classified information by the media. PREREQ: 3 semester hours of introductory political science courses.

PSC 310 Political Behavior ( $3,0,3$ ) Voting, campaigns, and recruitment of political leadership; academic background for courses in campaign management, public opinion, or elections. PREREQ: 3 semester hours of introductory political science courses.

PSC 311 Political Parties and Elections (3,0,3) Development and structure of U.S. party and electoral systems; party nominations, conventions, funding, and campaigning; role of elections in the political system. PREREQ: 3 semester hours of introductory political science courses.

PSC 312 Modern Ideologies (3,0,3) Major political ideologies of the 20th and 21st centuries: liberal democratic capitalism, democratic socialism, fascism, and communism; role of propaganda and political socialization in dissemination of ideological values; relationships among ideology, nationalism, and revolution. PREREQ: 3 semester hours of introductory political science courses.

PSC 315 Scope and Methods $(3,0,3)$ Philosophical foundations of political analysis; various methodologies and quantitative techniques; nature of the role of the political scientist. PREREQ: 3 semester hours of introductory political science courses.

PSC 316 Data Analysis (2,3,3) Applied current research techniques in, e.g., legal research, survey research, use of microcomputers, management of information, and applied governmental research. PREREQ: PSC 315.

PSC 320 American Politics in Film $(3,0,3)$ Role of films in shaping public agendas, enhancing awareness of public issues; effect of films on public understanding of political processes and problems; examination of accuracy and bias of political messages in films. PREREQ: 3 semester hours of introductory political science courses.

PSC 330 Politics of Europe $(3,0,3)$ Organization and functioning of modern European political systems, especially Great Britain, France, Germany, and Italy. PREREQ: 3 semester hours of introductory political science courses.

PSC 335 Latin American Politics $(3,0,3)$ Comparative analysis of selected republics, especially Argentina, Brazil, Chile, Peru, and Venezuela. PREREQ: 3 semester hours of introductory political science courses.

PSC 338 U.S. Foreign Policy and the Developing World (3,0,3) A comprehensive examination of the theory and practice of United States foreign policy in the developing world and critical analysis of the implications of such policy on U.S./Developing World relations. Analysis aimed to assist students to see and understand how the perceptions formed by both sides are based on how they view the impact of the policy on their perceived national interests. PREREQ: 3 semester hours of introductory political science courses.

PSC 355 Comparative Revolutionary Politics $(3,0,3)$ Comparative analysis of major western revolutions and Third World revolutions; causes and consequences of revolutionary activity. PREREQ: 3 semester hours of introductory political science courses.

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PSC 366 Government and Politics in Africa (3,0,3) A comprehensive introduction to the theory, practice and reality of Government and Politics in Africa. The major intent is to help the student to better grasp and comprehend the structure, function and nature of government and politics in Africa from colonialism to the present, as well as the policies resulting and their impact on the African polity and the greater international community. PREREQ: 3 semester hours of introductory political science courses

PSC 370 Pre-Enlightenment Political Theory $(3,0,3)$ Nature of political life; basic questions examined through close reading of original works of early Greek and Christian thinkers. PREREQ: 3 semester hours of introductory political science or philosophy courses.

PSC 373 Enlightenment and Post Enlightenment Political Theory (3,0,3) Reactions against pre-Enlightenment though such as natural rights, social contract and liberal democracy. PREREQ: 3 semester hours of introductory political science or philosophy courses.

PSC 382 Canadian Politics and Policies $(3,0,3)$ To provide a comprehensive analysis of the theory, practice and reality of Canadian politics and policies. The major intent is to help the student better grasp and comprehend the structure and nature of government and politics in Canada, as well as the policies resulting and their impact on the Canadian policy and the greater international community. PREREQ: 3 semester hours of introductory political science courses

PSC 394 Topics: American Politics $(3,0,3)$ Topics vary from semester to semester. See Schedule of Classes for topic and prerequisites. May be repeated. PREREQ: 3 semester hours of introductory political science course.

PSC 394 Topics: Theory and Practice $(3,0,3)$ Topics vary from semester to semester. See Schedule of Classes for topic and prerequisites. May be repeated. PREREQ: 3 semester hours of introductory political science courses.

PSC 394 Topics: Comparative Politics $(3,0,3)$ Topics vary from semester to semester. See Schedule of Classes for topic and prerequisites. May be repeated. PREREQ: 3 semester hours of introductory political science courses.

PSC 394 Topics: International Politics (3,0,3) Topics vary from semester to semester. See Schedule of Classes for topic and prerequisites. May be repeated. PREREQ: 3 semester hours of introductory political science courses.

PSC 403 Public Policy $(3,0,3)$ Forces molding public choice; general processes of policy formation and adoption; analysis of implementation of policies dealing with problems of compliance and policy impact, distribution, and evaluation; major domestic public policy issues including criminal justice, social welfare, environment, health care, and taxation. PREREQ: 3 semester hours of introductory political science courses.

PSC 410 Political Economy (3,0,3) Interaction between politics and economics at the domestic and international levels; process leading to national and international distribution of wealth and economic development. PREREQ: 6 semester hours of introductory political science or economics courses.

PSC 415 United States Foreign Policy $(3,0,3)$ The historical setting, foreign policy process models, institutions and actors that influence United States foreign policy, emerging and enduring issues addressed by states. PREREQ: 3 semester hours of introductory political science courses.

PSC 420 International Terrorism $(3,0,3)$ This course is designed to acquaint students with a comprehensive introduction to the theory and practice of international terrorism. The class will focus on understanding the concept of terrorism and what role it plays in international as well as domestic politics. An attempt will also be made to explore the driving forces that motivate acts of terrorism that include religious, political, and economic components, inter alia. PREREQ: 3 semester hours of introductory political science courses.

PSC 430 Politics and Mass Media (3,0,3) Impact of media on political process in the United States; structure and ownership of mass media; mass media and political behavior; role of the media in campaigns, elections and policy making. PREREQ: 3 semester hours of introductory political science courses.

PSC 470 The Post-Cold War World (3,0,3) A global approach to international politics through studying the interdependence of the political, economic, envi-
ronmental, and cultural relationships in today's world; characteristics of the evolving international system. PREREQ: 3 semester hours of introductory political science courses

PSC 480 International Law $(3,0,3)$ Development of international law; enforcement of international law; impact of international law on conduct of international relations among nation states. PREREQ: 6 semester hours of introductory political science courses.

PSC 481 International Organizations (3, 0, 3) Development of international organizations; recent international organizations; role of United Nations in peacekeeping and international socioeconomic and cultural development. PREREQ: 3 semester hours of introductory political science courses.

PSC 485 Comparative Foreign Policy $(3,0,3)$ Comparative analysis of foreign policies of selected states; decision-making and factors affecting foreign policy. PREREQ: 3 semester hours of introductory political science courses, or consent of instructor.

PSC 486 War in the Modern World $(3,0,3)$ This course is an investigation into the causes and correlates of conflict in our time, and how fighting these conflicts has changed over time. The course begins just prior to the year 1648, with the advent of the modern nation-state system, and unfolds to the present days of the "New World disorder," with the occurrence of acts of political terrorism upon American soil. PREREQ: 3 semester hours of introductory political science courses

PSC 496 Internship in Political Science (3 to 15 sem. hrs) Students may enroll for real-world experiential credit with public or private hosts. Students must have the consent of Internship Coordinator.

PSC 499 Readings and Practica for Seniors (1-3 sem hrs) Specialized reading or primary research interests completed through independent study at the direction of a specific instructor. May be repeated as projects vary. PREREQ: consent of program director.

## Psychology

PSY
PSY 100 Introduction to Psychology $(3,0,3)$ Systematic and scientific study of behavior from biological, behavioral, and cognitive perspectives; methods, history, biopsychology, perception, learning, development, cognition, personality, mental disorders, therapy, and social psychology. A general education course (behavioral sciences).

PSY 100H Honors Introduction to Psychology $(3,0,3)$ Scientific study of behavior and mental processes in a seminar setting; perspectives and topics covered in PSY 100; critical thinking and research methodology; independent work and active participation required. A general education course (behavioral sciences). PREREQ: minimum ACT composite of 24 or consent of instructor.

PSY 200 Psychology of Personal Adjustment (3,0,3) Personal growth and development including personal health; stress management; values clarification; moral dilemmas; interpersonal relations; social problems; career development. A general education course (behavioral sciences). PREREQ: PSY 100.

PSY 201 Psychology of Race and Gender $(3,0,3)$ Psychological effects of racism and sexism; gender, ethnicity, culture, politics, and economic and social issues in the United States. A general education course (behavioral sciences or race/ gender).

PSY 205 Psychology of Human Sexuality $(3,0,3)$ A survey in human sexuality focusing on biological, psychological, behavioral, and developmental issues. Sexual attitudes, values, and gender issues also addressed. Explicit content. A general education course (behavioral sciences). PREREQ: PSY 100.

PSY 206 Human Sexuality Forum $(3,0,3)$ Focuses on personal attitudes and values through structured exercises and discussion. Explicit content. Offered only during intersession; graded pass/fail. Credit is not given for both PSY 205 and PSY 206. Same as PSY 205. A general education course (behavioral sciences). PREREQ: PSY 100.

PSY 210 Research Methods in Psychology (3,0,3) Experimental and other research methods in psychological research. A laboratory experience is included. PREREQ: PSY 100 and STA 205. COREQ: PSY 210L and PSY 210R.

PSY 210L Research Tools in Psychology $(1,2,2)$ Skills needed to support PSY 210: use of computers and other tools in all phases of psychological research: information gathering, analysis, and communication; techniques of library searching, elements of writing in APA style, collecting and analyzing data. COREQ: PSY 210 and PSY 210R.

PSY 210R Career Planning for Psychology Majors (1,0,1) Assessment of individual values, interests, and abilities; investigation of psychology-related vocations; planning and decision-making skills regarding future careers. COREQ: PSY 210 and PSY 210L

PSY 220 Lifespan Development $(3,0,3)$ Psychological theory and research on physical, cognitive, personality, and social development across the life span. Students receiving credit for PSY 220 cannot also receive credit for either PSY 319 or PSY 320. A general education course (behavioral sciences). PREREQ: PSY 100.

PSY 300 Personality Psychology $(3,0,3)$ Overview of research findings in personality psychology; emphasis on empirically supported conclusions regarding personality. PREREQ: PSY 100.

PSY 301 Evolutionary Psychology $(3,0,3)$ Human nature from the perspective of biological evolution; natural history of species; altruism and cooperation; aggression, warfare, deception and prejudice; morality; mating strategies; cognition, perception, and learning. PREREQ: PSY 100.

PSY 302 The Human Side of Work (3,0,3) Psychology of work behavior; interpersonal relations and organizational effectiveness; communication, morale, stress, leadership styles, values, ethics, problem solving techniques, and cross cultural aspects of the work experience. The approach to learning is experiential and may include some field assignments. PREREQ: PSY 100.

PSY 304 Consumer Psychology (3,0,3) Psychological methods and concepts used to understand, explain, and predict the dynamics underlying, influencing, and determining consumer behavior; research methodology, individual and group influences, product attributes, promotional techniques, and consumer decision making. PREREQ: PSY100.

PSY 305 Psychological Testing $(3,0,3)$ Basic principles, applications, and issues as related to psychological testing and assessment; review and evaluation of widely used tests in major areas of application: intelligence, personality, achievement, aptitude, and vocational. PREREQ: PSY 100.

PSY 309 Psychology of Perception $(3,0,3)$ Current theories and research in understanding visual perception of color, movement, and illusions; perception in other sensory modalities. PREREQ: PSY 100.

PSY 309L Perception Laboratory (1,2,2) Laboratory to accompany PSY 309. PREREQ: PSY 210 or equivalent; PREREQ or COREQ: PSY 309 or equivalent.

PSY 311 Biopsychology $(3,0,3)$ Basic assumptions, theories, and empirical data relating neurobiological mechanisms and psychological processes of behavior; structural functional relationship of parts of the nervous system and their role in behavior. PREREQ: PSY 100.

PSY 311L Biopsychology Laboratory (1,2,2) Laboratory to accompany PSY 311. PREREQ: PSY 210 or equivalent and consent of instructor; PREREQ or COREQ: PSY 311 or equivalent.

PSY 319 Child Development $(3,0,3)$ Psychological theory and research on developmental and individual differences among children in the physical, cognitive, personality, and social domains; biological, psychosocial, and cultural contextual causes for these differences. Students receiving credit for PSY 319 cannot receive credit for PSY 220. PREREQ: PSY 100.

PSY 320 Adult Development ( $3,0,3$ ) Psychological development from adolescence through adulthood; physical, intellectual, social, and personality develop-
ment; developmental tasks involving identity formation, marriage, child rearing, work, retirement, and death. Students receiving credit for PSY 320 cannot also receive credit for PSY 220. PREREQ: PSY 100.

PSY 330 Behavior Modification $(3,0,3)$ Introduction to applied behavior analysis; the use of operant and classical conditioning to analyze and change behavior. PREREQ: PSY 100.

PSY 333 Abnormal Psychology (3,0,3) Symptoms, causes, and treatment of major mental disorders; research methods in psychopathology. PREREQ: PSY 100.

PSY 337 Animal Learning (3,0,3) Behavioral methodology, theory, and empirical basis of the scientific study of learning; classical and instrumental conditioning, discrimination and generalization, and the role of reward, punishment, and other motivational variables. PREREQ: PSY 100.

PSY 338 Cognitive Processes $(3,0,3)$ Cognitive methodology, theory, and empirical basis of the scientific study of human memory and information processing; thinking; problem solving; concept formation. PREREQ: PSY 100.

PSY 338L Cognitive Processes Laboratory (1,2,2) Laboratory to accompany PSY 338. PREREQ: PSY 210 or equivalent; PREREQ or COREQ: PSY 338 or equivalent.

PSY 340 Social Psychology $(3,0,3)$ Social perception and social influences on behavior; attribution, attitudes, attraction, aggression, pro-social behavior, compliance, and small groups. PREREQ: PSY 100.

PSY 340L Social Psychology Laboratory (1,2,2) Laboratory to accompany PSY 340. PREREQ: PSY 210 or equivalent. PREREQ or COREQ: PSY 340 or equivalent.

PSY 344 Industrial/Organizational Psychology (3,0,3) Psychological principles in business and industry; motivation, job satisfaction, leadership and communication theory, organizational structure, performance appraisal, personnel testing and selection, training, workplace design, and work environment. PREREQ: PSY 100.

PSY 345 Human Factors Psychology $(3,0,3)$ Humans in the design of manmade objects, facilities, and environments: the human as a system component, human capabilities and limitations, controls and displays, design of aerospace and surface vehicles, and designing for the handicapped. PREREQ: PSY 100.

PSY 348 Environmental Psychology ( $3,0,3$ ) Review of scientific literature on psychological aspects of interdependence of humans and their environment; environmental perception, effects of physical environment on behavior, physical space and behavior, environmental design, and strategies for preserving the environment. PREREQ: PSY 100.

PSY 350 Training Group Theory and Laboratory Method (3,0,3) Small groups and development of interpersonal effectiveness; individual and group roles; resolution of conflicts; interpersonal trust; helping relationships. Graded pass/fail. PREREQ: PSY 100.

PSY 360 Psychopharmacology $(3,0,3)$ Detailed analysis of how psychotherapeutic and recreational drugs affect the brain and behavior. Introduction to central nervous system structure and function, the biological basis of drug action in the brain, and the behavioral, clinical, and side-effect profiles of psychoactive drugs. PREREQ: PSY 100.

PSY 370 Humanistic Psychology (3,0,3) Humanistic psychology in historical context; Greek, Renaissance, and modern developments; comparison with psychoanalysis and behaviorism; major theories of Allport, Fromm, Maslow, Jung, Rogers, Frankl, and Perls; central themes; experience, identity, meaning, freedom, responsibility, and growth in psychology. PREREQ: PSY 100.

PSY 391W Writing in Psychology ( $3,0,3$ ) Practice in types of writing most commonly encountered in psychology (case study, literature review, and report of an empirical study). PREREQ: major in psychology, PSY 100, one additional course in psychology, ENG 101 or ENG 151H, and sophomore standing.

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PSY 400 Approaches to Psychotherapy $(3,0,3)$ Theories and techniques of psychoanalytic, humanistic, behavioral, and cognitive therapies; evaluation of treatment outcome research. PREREQ: PSY 210, PSY 210L, PSY 333.

PSY 405 Counseling Psychology $(2,2,3)$ Techniques of counseling; skills necessary in therapeutic interviewing; selection, application, and evaluation of appropriate goals, strategies, and tactics of counseling. PREREQ: PSY 100 and junior standing.

PSY 465 Health Psychology $(3,0,3)$ Guided readings, discussions, and evaluations of scientific literature on health and health related behaviors; understanding psychological, social, and biological determinants of health; multi-disciplinary focus. PREREQ: PSY 100 and junior standing.

PSY 475 History and Systems of Psychology $(3,0,3)$ Historical and philosophical basis of contemporary psychology; logic of science; introspectionist, functionalist, purposive, psychoanalytic, behaviorist, gestalt, and cognitive systems. PREREQ: 12 semester hours in psychology.

PSY 492 Research: Psychology (1-3 sem. hrs.) Individually supervised research in an area of faculty expertise; readings, design, data collection, analyses, report writing or presentation of findings. Specific activities assigned by instructor. Up to 3 semester hours may be earned per semester; no more than 6 semester hours of PSY 492 and/or PSY 499 may be applied toward certification of the major. PREREQ: consent of instructor and psychology chair prior to registration.

PSY 494 Special Topics in Psychology (1-3 semester hrs.) Seminar course; topic listed in Schedule of Classes each semester. PREREQ: PSY 100 and consent of instructor.

PSY 499 Independent Study: Psychology (1-3 sem. hrs.) Individually supervised areas of study; archival research, experiments, surveys, and/or applied projects. Specific activity is student initiated and in consultation with instructor. Up to 3 semester hours may be earned per semester; no more than 6 semester hours of PSY 492 and/or PSY 499 may be applied toward certification of the major. PREREQ: consent of instructor and psychology chair prior to registration.

PSY 550 Organizational Psychology $(3,0,3)$ Introductory graduate level study in organizational psychology; commitment, involvement, satisfaction, motivation, leadership, power, quality of work-life, and groups/teams. PREREQ: Consent of MSIO director.

PSY 570 Work Environments $(3,0,3)$ Introduction to human factors psychology; ergonomics; occupational health and safety; physical and psychological factors influencing the workplace. PREREQ: Consent of MSIO director.

PSY 580 Cognition in the Workplace $(3,0,3)$ Judgment and decision-making, heuristics, biases, persuasion, prejudice, diversity, values, and attitude measurement. PREREQ: Consent of MSIO director.

PSY 594 Special Topics: Psychology (3,0,3) Advanced seminar course; topic listed in Schedule of Classes each semester. Intended for graduate students and advanced undergraduates. PREREQ: consent of instructor.

## Radiologic Technology RAD

RAD 101 Introduction to Allied Health Professions (1,0,1) Introduction to the professions of respiratory care and radiologic technology, including basic job responsibilities/scope of practice, medical terminology, and patient assessment. More specific information regarding the respiratory care and radiography programs will be presented. Same as RSP 101.

RAD 200 Introduction to Radiography $(5,1,6)$ Introduction to program and profession; fundamental radiography principles and procedures; radiography of the chest and abdomen; foundation for all core radiography courses; orientation to clinical policies and procedures; observation of radiographic examinations under direct supervision by registered technologists at clinical sites. PREREQ: admission to radiologic technology program.

RAD 205 Professional Communication in the Health Sciences (3,0,3) Introduction to methods of professional communication relative to health care delivery;
topics will include medical terminology, computers in medicine, ethical and legal issues, charting, professionalism, and the team concept in health care.

RAD 208 Radiographic Procedures I (3,0,3) Radiographic anatomy, positioning, and image analysis of the appendicular skeleton, vertebral column and upper airway. PREREQ: RAD 200. COREQ: RAD 208L.

RAD 208L Radiographic Positioning Laboratory I ( $0,2,1$ ) Radiographic positioning of the appendicular skeleton and vertebral column using simulation and phantoms; supervised practice and film critique. Pass/fail only. COREQ: RAD 208

RAD 209 Radiographic Procedures II $(3,0,3)$ Continuation of RAD 208. Introduction to contrast studies; radiographic anatomy, positioning, and image analysis of the gastrointestinal, biliary and urinary systems, bony thorax, and cranium. PREREQ: RAD 208. COREQ: RAD 209L.

RAD 209L Radiographic Positioning Laboratory II ( $0,2,1$ ) Radiographic positioning of the gastrointestinal, biliary, and urinary systems, bony thorax, and cranium using simulation and phantoms; supervised practice and film critique. Pass/fail only. COREQ: RAD 209.

RAD 214 Analysis of Radiographic Quality $(3,0,3)$ Principles of radiographic exposure variables and processing; analysis of the radiographic image; problemsolving approach to practical application of principles. PREREQ: RAD 200. COREQ: RAD 214L

RAD 214L Analysis of Radiographic Quality Laboratory (0,2,1) Laboratory demonstration and experimentation coordinated with principles taught in RAD 214. PREREQ: RAD 200. COREQ: RAD 214.

RAD 216 Physical Principles of Radiographic Equipment (4,0,4) Principles of electromagnetism and the relationship to radiographic circuitry and equipment; construction and design of radiographic, fluoroscopic, mammographic, tomographic, and digital equipment. PREREQ: RAD 214.

RAD 286 Radiographic Practicum I $(1,16,3)$ Clinical application of principles of radiographic positioning, technique, and radiation protection; competency in chest, abdominal, appendicular skeleton, vertebral column, shoulder, and pelvic girdle radiography. Conducted under supervision of registered radiographers and clinical faculty. PREREQ: RAD 200.

RAD 296 Radiographic Practicum II $(1,16,3)$ Clinical application of principles of radiation protection and of radiographic positioning and technique; competency in portable radiography and in radiography of the cranium and G-U and G-I systems. Conducted under supervision of registered radiographers and clinical faculty. PREREQ: RAD286.

RAD 299 Independent Study (1-3 sem. hrs.) Individual readings, research, and/or clinical based coursework developed by the student in consultation with the instructor and approved by the radiologic technology program director prior to registration.

RAD 303 Radiographic Procedures III $(3,0,3)$ Pediatric, geriatric, trauma, and surgical radiography; mammography; introduction to specialized non-vascular and vascular radiographic procedures and equipment; lecture/discussion and guest speakers. PREREQ: RAD 209.

RAD 310 Advanced Radiographic Anatomy $(3,03)$ Cross-sectional human anatomy with emphasis on differentiating between normal and abnormal variants; neurological, vascular, cranial, and spinal anatomy related to specialized medical imaging techniques. PREREQ: RAD 334.

RAD 315 Ultrasonography: Physics and Instrumentation (3,0,3) Principles of ultrasound production, wave propagation, and ultrasound/tissue interactions; applications of principles to image production and equipment controls; bioeffect considerations and quality assurance assessments. Assumes a knowledge of elementary algebra. PREREQ: registered radiographer or consent of instructor.

RAD 325 Ultrasonography: Abdomen, Neck, and Thorax (3,0,3) Physiology and sectional anatomy of the upper abdomen including liver, pancreas, biliary tree, abdominal vascular structures, kidneys, spleen, and retroperitoneal struc-
tures; scanning techniques and pitfalls; clinical correlations and considerations associated with pathology.

RAD 326 Ultrasonography: Obstetrics and Gynecology ( $3,0,3$ ) Physiology and sectional anatomy of the female pelvis; embryological and fetal development; identification of normal and abnormal fetal structures and associated pathology; antepartum monitoring techniques; scanning techniques and pitfalls; clinical correlations and considerations associated with pathology.

RAD 330 Radiology Department Planning (3,0,3) Analysis of the structural; functional, and organizational characteristics of radiology departments; equipment acquisition, shielding installation, work-flow patterns, and the staffing process.

RAD 334 Specialized Medical Imaging (3,0,3) Introduction to specialized imaging and therapeutic modalities, including CT scanning, digital imaging, MRI, medical sonography, bone densitometry, nuclear medicine, and radiation therapy; sectional anatomy and related procedures and equipment. PREREQ: RAD 303.

RAD 340 Radiation Biology and Protection (3,0,3) Biological effects of ionizing radiation; radiation safety requirements and procedures; laboratory demonstration/experimentation. PREREQ: RAD 216.

RAD 350 Clinical Pathology for Radiographers (3,0,3) Anatomy, pathology, and mechanisms of disease with its radiological manifestation in radiographic studies; case studies; radiology presentations. PREREQ: RAD 303 and BIO 209.

RAD 360 Quality Assurance $(1,2,2)$ Clinical and administrative aspects of quality assurance to include: elements of QA; risk management; data collection and reporting; involvement of appropriate personnel; financial implications of QA; quality control of diverse radiology equipment; accreditation standards. PREREQ: RAD 216.

RAD 376 Radiographic Practicum III $(0,16,2)$ Clinical application of principles of radiation protection and of radiographic positioning and technique; competency in radiography of the skeletal and digestive systems. Five-week internship that includes a one-week evening assignment; conducted under supervision of registered radiographers and clinical faculty. PREREQ: RAD 296.

RAD 386 Radiographic Practicum IV $(1,16,3)$ Clinical application of principles of radiographic positioning, technique, and radiation protection; competency in surgical and non-routine radiography and continued competency in routine skeletal and contrast studies. Conducted under supervision of registered radiographers and clinical faculty. PREREQ: RAD 376.

RAD 394 Seminar: Radiography $(1,0,1)$ Comprehensive review and assessment of essential concepts in radiography; preparation for the ARRT examination. PREREQ: RAD 340.

RAD 396 Radiographic Practicum V $(0,24,3)$ Clinical application of principles of radiographic positioning, technique, and radiation protection; introduction to advanced medical imaging modalities; continued competency development in non-routine radiography. Conducted under supervision of registered radiographers and clinical faculty. PREREQ: RAD 386.
RAD 410 Radiology Department Management $(3,0.3)$ Basic applied radiology management functions; personnel and patient scheduling; purchasing procedures; budget and quality control processes; organizational relationships and authority.

RAD 440 Radiology Management Practicum $(0,24,3)$ Selected placement of qualified students in an affiliate hospital radiology department; work experience includes scheduling and evaluation procedures, quality assurance procedures, and equipment acquisition planning. Practicum will be contracted between student, faculty advisor, and hospital preceptor.

RAD 450 Advanced Imaging Pathology $(3,0,3)$ Anatomy, pathology, and mechanisms of disease with its radiological manifestation in nuclear medicine, CT, MRI, cardiac and vascular imaging, ultrasound, doppler, and mammography studies; case studies; radiology presentations.

RAD 470 Topics: Advanced Imaging $(3,0,3)$ In-depth study of theory, principles, and applications of magnetic resonance imaging, computed tomography, or vascular imaging. Offered according to demand and interest of students at discretion of radiologic technology faculty. Topic announced in the Schedule of Classes. May be repeated, when topics vary, for a maximum of 9 semester hours. PREREQ: RAD 396.

RAD 490 Senior Seminar $(2,0,2)$ Discussion of current issues and problems related to health care professions. PREREQ: senior standing.

RAD 496 Practicum: Advanced Imaging $(0,24,3)$ Clinical application of principles of CT, MRI, or special procedures; content includes procedures, equipment, image production and/or scanning techniques. Conducted under supervision of registered technologists and clinical faculty. May be repeated for a maximum of 9 semester hours. PREREQ: RAD 396.

RAD 499 Topics: Radiology $(3,0,3)$ Intensive study of a special topic or issue in radiologic technology through independent study. May be repeated for credit.

## Religious Studies <br> REL

REL 181 Survey of the Hebrew Bible (Old Testament) (3,0,3) Major figures, main themes, basic values, and primary beliefs found in the Hebrew Bible in its religious, philosophical, political, and historical contexts. A general education course (history or humanities).

REL 182 Survey of the New Testament $(3,0,3)$ Major figures, main themes, basic values, and primary beliefs of New Testament writings in their religious, philosophical, political, and historical contexts. A general education course (history or humanities).

REL 185 Survey of Christianity (3,0,3) Main beliefs, figures, orientations, and branches of the Christian tradition; contemporary movements and issues. A general education course (history or humanities).

REL 186 Introduction to Judaism $(3,0,3)$ Introduction to the history of Judaism, major beliefs, branches, ceremonies and rituals central to contemporary Jewish life. This course is sponsored by the Jewish Chautaugua Society. A general education course (history or humanities).

REL 201 Ideas in Religious Studies (3,0,3) Issues and/or works in religious studies revolving around a selected theme or concern. May be repeated as topics vary. A general education course (humanities).

REL 250 World Religions and Ethics $(3,0,3)$ Comparative study of the ethical dimension of the world religions: moral ideals, models of virtue, codes of ethics; views on topics such as the relation between the sexes, race, work, human rights, political responsibility, and war; focus mainly upon Hinduism, Buddhism, Islam, Judaism, and Christianity.

REL 260 Human Religious Experience (3,0,3) Various facets of the experiential dimension of religion (e.g., the religious life, the communication of religious experience, religious autobiography, theories of the nature and function of religious experience, and mysticism).

REL 305 Islam $(3,0,3)$ This course is both historical and topical in its treatment of Islam. Our first emphasis will be on the life and career of Prophet Muhammad, the teachings of the Qur'an, the development of the Muslim community and its principal institutions to about 1300 CE. Topically we will cover the Qur'an, the basic beliefs and practices of Islam, and Sufism (Islamic mysticism). We will also consider the current situation in the Islamic world and the Islamic community in the West, particularly the United States. PREREQ: 3 semester hours in religious studies or philosophy.

REL 320 Religion in America $(3,0,3)$ Reading and discussion of writings of representative contemporary theologians and writers; development of awareness of basic issues and patterns in recent theological thinking.

REL 325 African American Religious Experience in America (3,0,3) Religion in shaping the historical cultural and spiritual sojourn of African Americans. Topics include the roots, history, and diversity of African American religious expression; its values, norms and traditions; the role of women; and its relation
to popular culture. A general education course (race/gender) and may count toward minor in Afro-American Studies. PREREQ: sophomore standing.

REL 330 Contemporary Religious Thought $(3,0,3)$ Reading and discussion of writings of representative contemporary theologians and writers; development of awareness of basis issues and patterns in recent theological thinking.

REL 370 Religion and Science $(3,0,3)$ Various approaches to the relationship between religion and science; historical conflict; the developing dialogue between religion and science; cosmology; evolution. The course seeks to introduce students to a wide range of concerns and does not presuppose detailed knowledge of religion or science. A general education course (humanities). PREREQ: sophomore standing.

REL 394 Topics: Religious Studies (3,0,3) In-depth examination of a major thinker, school, or issue in religious studies. Topic announced in Schedule of Classes. May be repeated as topics vary. PREREQ: 3 semester hours in religious studies or philosophy.

REL 594 Topics: Religious Studies (3,0,3) Selected topics in religious studies. May be repeated as topics vary. PREREQ: consent of instructor.

REL 599 Independent Study $(3,0,3)$ Individually supervised readings and study of a selected topic in religious studies. May be repeated as topics vary. PREREQ: consent of instructor.

## Respiratory Care <br> RSP

RSP 101 Introduction to Allied Health Professions $(1,0,1)$ Introduction to the professions of respiratory care and radiologic technology, including basic job responsibilities/scope of practice, medical terminology, and patient assessment. More specific information regarding the respiratory care and radiography programs will be presented. Same as RAD 101.

RSP 201 Fundamentals of Respiratory Care (4,0,4) Introductory respiratory care theory and procedures; medical terminology and mathematics review; basic respiratory system anatomy and physiology; pharmacology and administration procedures for aerosolized medications; theory and equipment for oxygen therapy, pulse oximetry, hyperinflation therapy, and mucus clearance techniques; principles of infection control. PREREQ: admission to respiratory care program. COREQ: RSP 201L and RSP 286.

RSP 201L Patient Assessment Lab (0,2,1) Demonstration and practice in basic respiratory care procedures; proper body mechanics, patient assessment, administration of oxygen therapy, bland aerosol therapy, incentive spirometry, aerosolized medication, and mucus clearance techniques. COREQ: RSP 201.

RSP 220 Ventilatory Support $(3,0,3)$ Theory and application of procedures and equipment used for airway management, non-invasive ventilatory support, cardiopulmonary resuscitation, ECG arrhythmia recognition and treatment, bland aerosol and humidity therapy, arterial puncture, pharmacological treatment of infectious processes, and equipment disinfection and sterilization. PREREQ: RSP 201-201L. COREQ: RSP 220L.

RSP 220L Respiratory Lab II $(0,2,1)$ Demonstration and practice in intermediate respiratory care procedures: hand ventilation, nasotracheal and endotracheal suctioning, lung volume expansion therapies, cardiopulmonary resuscitation, tracheal tube care, and blood oxygen monitoring by means of pulse oximetry and arterial puncture. PREREQ: RSP 201-201L. COREQ: RSP 220.

RSP 235 Respiratory Physiology and Physics $(3,0,3)$ Functional anatomy of respiratory systems structures; mechanics and control of ventilation; pulmonary blood flow and the matching of ventilation with profusion; acid-balance and the interpretation of blood gases; oxygen transport and the concepts of shunting and dead space; physics of gasses applicable to respiratory care. PREREQ: RSP 201-201L and BIO 208-208L. COREQ:BIO 209-209L.

RSP 286 Clinical Practicum I $(0,16,2)$ Professionally supervised experience in basic respiratory care procedures in acute-care hospitals: oxygen administration, lung expansion therapies, aerosolized medication administration, and mucus clearance techniques; proper documentation and preparation of clinical case reports. COREQ: RSP 201 and RSP 201L.

RSP 296 Clinical Practicum II $(0,16,2)$ Professionally supervised experience in basic and intermediate respiratory care procedures; suctioning, hand ventilation, arterial puncture, phlebotomy, CPR, and care of patients with artificial airways; developing skill in time management, organization and effective communication with other health care professionals. PREREQ: RSP 286. COREQ: RSP 220220L.

RSP 299 Independent Study: Respiratory Care (1-3 sem. hrs.) Individually supervised work involving readings, research, and/or clinical activities in areas of special interest or need. Topics, activities, and evaluation procedures specified by instructor and approved by program director prior to registration. May be repeated for a maximum of 6 semester hours.

RSP 310 Artificial Ventilation (3,0,3) Theory and procedures for providing artificial ventilation to patients in respiratory failure; indications for ventilatory support; techniques for evaluating ventilatory reserve; management and weaning of patients on ventilators; critical thinking in application of PEEP, IMV, Pressure Support, and other modes of respiratory therapy used for critical patients. PREREQ: RSP 220/220L. COREQ: RSP 310L.

RSP 310L Respiratory Lab II $(0,2,1)$ Demonstration and practice with procedures and equipment used for the artificial ventilation, weaning and monitoring of patients requiring life support; pre-clinical training with the ventilators and procedures needed for RSP 386 Respiratory Practicum III, involving clinical experience with patients on artificial ventilation in area hospitals. PREREQ: RSP 220-220L. COREQ: RSP 310.

RSP 331 Cardiopulmonary Diagnostics $(2,0,2)$ Theory, procedures, and instrumentation used to evaluate hemodynamic and pulmonary function; interpretation of pressure waveforms and measurements and cardiovascular calculations and pulmonary function studies; quality control procedures; recent advancements in critical care.

RSP 340 Pulmonary Rehabilitation $(1,0,1)$ Components of a pulmonary rehabilitation program; physiological and psychosocial problems of patients with chronic pulmonary disease; design and implementation of a program of education and exercise tailored to meet needs of the individual patient.

RSP 350 Chest Diseases $(3,0,3)$ Assessment techniques for pulmonary disease patients including history taking, chest physical exam, basic X-ray, lab study, and PFT interpretation; clinical presentation, pathology, and management of common pulmonary diseases-asthma, chronic bronchitis, emphysema, bronchiectasis, pneumonia, pulmonary embolism, heart failure, chest trauma, sleep apnea, adult respiratory distress syndrome, and neuromuscular disorders.

RSP 362 Prenatal-Pediatric Respiratory Care (3,0,3) Prenatal lung development, fetal circulation, and changes at birth; differences in respiratory anatomy and physiology between young children and adults; specialized techniques of airway management and artificial ventilation; applications of respiratory system monitoring and therapeutic modalities; respiratory diseases commonly seen in pediatrics. PREREQ: RSP 310. COREQ: RSP 396.

RSP 386 Clinical Practicum III $(0,16,3)$ Artificial ventilation to patients on life support; initial ventilator set-up, control adjustments, monitoring, circuit changes, and weaning; further experience with artificial airways and routine respiratory care procedures in the critical care setting. PREREQ: RSP 296. COREQ: RSP 310-310L.

RSP 396 Clinical Practicum IV $(0,16,3)$ Further experience in applications of respiratory care in the intensive care unit, cardioplumonary monitoring, applications of pulmonary rehabilitation, pediatric respiratory care. PREREQ: RSP 296. COREQ: RSP 331 and RSP 362.

RSP 441 Disease Management I $(3,0,3)$ Students will review the delivery of health care to chronically ill patients with lung and heart disorders with emphasis on the respiratory care. Patient case reviews will utilize a multidisciplinary approach to case management and responsibilities unique to the respiratory therapist. This course will aid those wishing to become certified asthma educators.

RSP 442 Disease Management II $(3,0,3)$ Students will review the rationale and methods used in cardiopulmonary diagnostics and cardiopulmonary rehabilitation in hospital-based programs, long-term care facilities and in the home. Patient case reviews will utilize a multidisciplinary approach to case manage-
ment and responsibilities unique to the respiratory therapist. PREREQ: RSP 441.

RSP 451 Polysomnography I $(2,1,3)$ This course is designed to provide both didactic and laboratory training for entry-level personnel in the basics of Polysomnographic Technology. Students will become familiar with medical terminology, instrumentation setup and calibration, recording and monitoring techniques, documentation, professional issues, and patient-technologist interactions related to Polysomnographic Technology. Laboratory sessions will provide practical experience in the skills required of an entry-level Polysomnographic Technologist.

RSP 452 Polysomnography II $(2,2,3)$ Presentation and discussion of psychomotor practices related to interpretation of the polysomnogram for adult and pediatric patients. Emphasis on therapeutic equipment, protocols, artifact recognition and troubleshooting of the equipment.

RSP 480 Respiratory Care Seminar ( $3,0,3$ ) Contemporary ethical and legal issues affecting the practice of respiratory care; effects of managed care and other market forces on departmental operations; resume preparation and other job search skills; preparation for and practice with Entry Level, Written Registry, and Clinical Simulation examinations for self-assessment. PREREQ: junior status in the respiratory care program

RSP 486 Clinical Practicum V $(0,16,3)$ Experience providing neonatal respiratory care; training in airway management techniques; development of leadership and time management skills; summative clinical rotations. PREREQ: RSP 396.

RSP 496 Respiratory Clinical VI $(3,0,3)$ Students will complete clinical competencies focused in the areas of specialization of either disease management or polysomongraphy.

## Russian RUS

RUS 101 Elementary Russian I $(3,1,4)$ Basic principles of the Russian language, including study of Cyrillic alphabet, pronunciation, and simple idioms. A general education course (humanities).

RUS 102 Elementary Russian II $(3,1,4)$ Continuation of RUS 101, with addition of new vocabulary and more complex grammar and idiom forms. A general education course (humanities). PREREQ: RUS 101 or equivalent.

RUS 201 Intermediate Russian I $(3,0,3)$ Continuation of RUS 102, with addition of new vocabulary and more complex grammar and idiom forms, as well as more complex cultural and literary readings. A general education course (humanities or non-western). PREREQ: RUS 102.

RUS 201 Intermediate Russian II (3,0,3) Continuation of RUS 201; advanced vocabulary and more complex grammar and idiom forms, as well as more complex cultural and literary readings. A general education course (humanities or non-western). PREREQ: RUS 201.

## Integrated Sciences <br> SCI

SCI 110 Integrative Natural Science I (2,3,4) Introduction to the scientific process and major ideas of the natural sciences from the perspective of the various scientific disciplines. A general education course (natural science).PREREQ: Math ACT of 18 or placement. PREREQ or COREQ: ENG 101.

SCI 110H Honors Integrative Natural Science I $(2,3,4)$ Introduction to the scientific process and major ideas of the natural sciences from the perspective of the various scientific disciplines. A general education course (natural science).PREREQ: Math ACT of 18 or placement. PREREQ or COREQ: ENG 101. or ENG 151

SCI 111 Integrative Natural Science II $(2,4,4)$ Continuation of SCI 110; current issues in science and the environment. A general education course (natural science).PREREQ: SCI 110.

SCI 370 A Survey of Computational Science $(3,0,3)$ An introduction to computational methods commonly used in the natural sciences. Topics will be selected from the following: numerical differentiation and integration, root finding, find-
ing extrema, Fourier transforms, sorting, statistics, random number, Monte Carlo, molecular dynamics, and cellular automata. PREREQ: MAT 120 or MAT 122, PHY 211 or PHY 220, INF 260, and completion of the natural science general education requirement.

## Sociology <br> SOC

SOC 100 Introductory Sociology $(3,0,3)$ Concepts and methods, socialization, group processes, social institutions, and social change. A general education course (behavioral sciences).

SOC 110 Introduction to Race and Gender $(3,0,3)$ Issues of race and gender relations in the U.S. and other societies; basic information on race/gender and their forms and functions in multicultural, multiethnic society. A general education course (race/gender perspective).

SOC 202 Juvenile Delinquency $(3,0,3)$ Definition; investigation of evidence and etiology; judicial change and youth corrections. PREREQ: SOC 100.

SOC 203 Sociology of Corrections (3,0,3) Survey of correction systems; historical trends, facilities and programs, alternatives to institutionalization such as probation and parole, and relations to society. PREREQ: SOC 100.

SOC 205 Current Social Issues $(3,0,3)$ Analysis of one or more major current issues, e.g., abortion, nuclear proliferation, poverty, or fundamentalist religious movements; advancement of student comprehension of social issues, using the perspective and methods of sociology. Topic(s) will change regularly and will be announced at time of offering. A general education course (behavioral sciences).

SOC 208 Police and Society $(3,0,3)$ Roles of police as formal social control agents in stratified society; impact of social change on police work; policing as an occupation; changing community standards; social characteristics of police; styles of policing. PREREQ: SOC 100 or LEN 100.

SOC 210 Analysis of Racism and Sexism in the United States (3,0,3) In-depth analysis of the role of social institutions in perpetuating racism/sexism in American society; religion, science, law, political and economic order, education, and mass media. A general education course (race/gender perspective).

SOC 240 Peoples of Africa $(3,0,3)$ Prehistory, geography, history, and cultures of Sub-Saharan Africa to the present; culture area concept. Same as ANT 245. A general education course (behavioral science).

SOC 245 Peoples of Latin America (3,0,3) Contemporary cultures of Latin America; problems of contact, colonization, acculturation, development of the area cultural tradition; contemporary urbanization. A general education course (behavioral sciences or non-western perspective). Same as ANT 245. PREREQ: sophomore standing.

SOC 300 Race and Ethnic Relations (3,0,3) Dominant-minority intergroup relations; prejudice, discrimination, and other intergroup processes; racial and ethnic minorities in U.S. society. PREREQ: SOC 100.

SOC 301 World Patterns of Race and Ethnicity (3,0,3) Patterns of intergroup relations in multi-ethnic societies (e.g., South Africa, Brazil, Israel, and Northern Ireland); similarities and differences between these and U.S. Same as ANT 301. PREREQ: SOC 100 or ANT 100.

SOC 303 Social Psychology $(3,0,3)$ Interactionist approach to study of development of the self; social roles; identity; social relationships; creativity; deviance; social control.

SOC 305 Criminology $(3,0,3)$ Concepts, theories, and major research findings of crime and criminal behavior; analysis of the criminal justice system, including various forms of corrections and rehabilitation. PREREQ: SOC 100.

SOC 307 Social Stratification $(3,0,3)$ Theories of social class; distribution of wealth, prestige, and power in U.S.; patterns of social mobility. PREREQ: SOC 100.

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SOC 308 Social Organization $(3,0,3)$ Structure and function of organized groups and organizational behavior; formal organization. PREREQ: SOC 100.

SOC 315 Marriage and the Family (3,0,3) Major theoretical approaches with emphasis on interaction; the family as a social institution, with cultural, social, and emotional implications of dating and mate selection; meeting family crises and problems; marital adjustment; social changes affecting the family. PREREQ: SOC 100.

SOC 318 Sociology of Work and Occupations $(3,0,3)$ An analysis of work and occupations in the global economy as well as the structural forces that impact work in the USA and internationally. PREREQ: SOC 100.

SOC 320 Social Research $(4,0,4)$ Overview of the research process; principles of research design; major methods of data collection; interviewing techniques; hand-on experience with selected research design and analysis. PREREQ: SOC 100.

SOC 321 Applied Social Research (3,0,3) Application of standard social science techniques for analyzing social data; introduction to use of computers, social science software programs, and frequently used statistical routines in processing information generated by research studies. PREREQ: SOC 100; SOC 320 strongly recommended.

SOC 322 Applied Sociology (3,0,3) History of applied sociology; ethical concerns in applied research; program design and implementation; microcomputer applications; need assessments; principles and practice of evaluation research. PREREQ: SOC 100.

SOC 330 Sociological Theory $(3,0,3)$ Major classical and contemporary sociological theories and their exponents. PREREQ: SOC 100.

SOC 332 Collective Behavior $(3,0,3)$ Crowd, mass, and public behavior; relationship to social improvements (especially contemporary); analysis of leadership roles in various types of collective behavior; factors and processes at work in emergence of social order.

SOC 335 Popular Culture $(3,0,3)$ Expression and contest of popular culture as it relates to social change and thought in U.S. during the 20th century; social implications of democratic ideals, sexual mores, arts vs. pornography, youth culture, roles of music and advertising, images of women, and social and ethnic stereotypes. PREREQ: SOC 100.

SOC 340 Population $(3,0,3)$ Fertility, mortality, and internal and international migration; population dynamics; interdependence of demographics and social and economic variable. PREREQ: SOC 100.

SOC 342 Sociology of Aging ( $3,0,3$ ) Social and demographic characteristics of the elderly population; sociological theories and methods for studying the elderly; adjustment problems of aging; prejudice and discrimination against the elderly. PREREQ: SOC 100.

SOC 350 Women and Crime $(3,0,3)$ Sociological analysis of gender issues for women as victims, offenders, and professionals in law enforcement; power imbalance experienced by women in criminal justice. PREREQ: SOC 100

SOC 355 Sociology of the Environment (3,0,3) Analysis of social causes and consequences of environmental degradation; examination of responses to U.S. environmental problems by government, communities, and environmental organizations; assessment of U.S. environmental policies; application of sociological theory and research methods to environmental issues.
SOC 357 Guns and Society $(3,0,3)$ Social and demographic analysis of the characteristics of the ownership, usage, and impact of guns in the U.S.; cross-cultural perspective on the development of gun cultures. PREREQ: SOC 100.

SOC 360 Technology and Social Change $(3,0,3)$ Sociological analysis of interaction of technology and society; social issues arising with technological advancement; sociological factors influencing the direction of technological change and the adoption of technology; issues of the role of science in contemporary society. PREREQ: SOC 100.

SOC 364 Women and Men in Society $(3,0,3)$ Using major theoretical perspectives, the course provides an analysis of the roles of women and men in Ameri-
can society, as well as cross culturally; provides a greater understanding of the social forces influencing women and men in society. PREREQ: SOC 100.

SOC 369 Sex Crimes $(3,0,3)$ Sociological analysis of patterns of sex crimes and responses to them; primary focus on the United States. PREREQ: SOC 100 or JUS 101.

SOC 380 Elite Deviance $(3,0,3)$ Sociological examination of corporate and governmental deviance. PREREQ: SOC 100.

SOC 381 Deviance and Social Control (3,0,3) Forms of social control used to maintain social order; techniques of control ranging from manners to law. PREREQ: SOC 100.

SOC 391 Research Practicum I (3 sem. hrs.) Placement with agency for supervised experience in developing or applying research skills. Students will also meet with other practicum students and faculty field supervisors. Same as ANT 391. PREREQ: SOC 460.

SOC 394 Topics: Sociology $(3,0,3)$ A recent development in any phase of sociology. See Schedule of Classes for current topic and prerequisites.

SOC 400 Urban Society $(3,0,3)$ Urbanization, industrialization, metropolitanization, and urban ecology; impact of large-scale population aggregations on social institutions; adaptation and adjustment of migrants; developing nations. PREREQ: SOC 100.

SOC 420 Community Corrections $(3,0,3)$ Community-based corrections, including court diversion, probation, parole, and prison release; careers in community corrections; halfway houses, work release, home incarceration, and furlough programs. PREREQ: SOC 100 or JUS 101.

SOC 425 Political Sociology $(3,0,3)$ Theories of power and legitimacy; elites and masses; power structures of U.S. and other societies: social correlates of political ideology; socio-political movements. PREREQ: SOC 100, or PSC 100.

SOC 430 Sociology of Religion $(3,0,3)$ Religion as a social institution; religious behavior; structure and function of religious institutions; interdependence with other social institution. PREREQ: SOC 100.

SOC 450 Medical Sociology ( $3,0,3$ ) Major sociological theories of sickness and health; social and cultural aspects of disease definition, help seeking, and response to illness; provider-patient roles and relationships; health care delivery systems in various societies. PREREQ: SOC 100.

SOC 455 Comparative Criminal Justice (3,0,3) Different criminal justice systems throughout the world; different legal traditions and comparison of procedures in the adversarial-accusatorial and inquisitorial models of law. PREREQ: SOC 100 or JUS 101.

SOC 460 Research Practicum Preparation $(1,0,1)$ Small-group seminar to introduce practicum skills: finding a placement assignment, writing a project proposal, making a contract, working with agency/business personnel, working in teams, scheduling projects, writing reports, managing time, Same as ANT 460. PREREQ: SOC 322 or ANT 325.

SOC 488 Sociology of Law $(3,0,3)$ Social and cultural factors influencing emergence and maintenance of law as a social institution and affecting relations between law and deviant behavior; theoretical and methodological issues encountered in study of law. PREREQ: SOC 100.

SOC 491 Research Practicum II $(3,0,3)$ Continuation of SOC 391. Same as ANT 491.

SOC 494 Seminar: Sociology Senior Seminar $(2,0,2)$ Senior seminar required as a capstone experience for seniors majoring in sociology. PREREQ: SOC 100 and at least 21 semester hours in sociology and senior standing.

SOC 499 Readings: Sociology $(3,0,3)$ Specialized topics or research interest. PREREQ: consent of instructor.

SOC 520 Sociology of Education $(3,0,3)$ Connection of education to the external social system; education as a web of organizations and associations and as a subsystem of other institutions. PREREQ: consent of instructor.

SOC 594 Topics: Sociology $(3,0,3)$ Selected topics in sociology. May be repeated as topics vary. PREREQ: consent of instructor.

SOC 599 Independent Studies (3,0,3) Individually supervised readings and study of a selected topic in sociology. May be repeated as topics vary. PREREQ: consent of instructor.

## Sports Business <br> SPB

SPB 305 Sports Marketing 3,0,3) Sports Marketing will build upon the marketing knowledge base and provide an overview of all the issues faced by marketing managers within the sports industry and outside the industry who market through sports. Students will be introduced to the unique qualities of the sports product and also examine the promotion mix, pricing and distribution issues as they relate to the sports industry. PREREQ: MKT 305.

SPB 308 Sports Promotion Tools $(3,0,3)$ This course is designed to analyze the current factors and issues related to the sports promotion mix, including sponsorship planning, sales and negotiations, advertising and community relations. PREREQ: MKT 305.

SPB 309 Sports Public Relations $(3,0,3)$ Introduction to the element of the promotion mix that identifies, establishes and maintains mutually beneficial relationships between the sports organizations and the various publics on which its success or failure depends. PREREQ: MKT 305.

SPB 330 Sports Legal Environment $(3,0,3)$ This course will explore the landmark decisions and social environment, which have transformed sports into a very powerful industry enjoying special protection under the law. Topics will include sports franchise rights, legal issues, anti trust laws, sports agents, injuries to athletics, intercollegiate sports, collective bargaining issues, the powers of the Commissioner and gender equality. PREREQ: Junior standing.

SPB 396 Internship: Sports Business $(3,0,3)$ Supervised professional work experience in approved sport or sports related organization. PREREQ: SPB 305 or consent of instructor.

SPB 480 Sports Business Strategies and Policies $(3,0,3)$ Application of theories to a wide variety of current issues and problems within the sports industry using case analysis. Open only to students certified as majoring in Sports Business. PREREQ: SPB 308, SPB 330 and senior standing.

## Spanish <br> SPI

SPI 101 Elementary Spanish I $(3,1,4)$ Basic principles; oral-aural approach; drill in Spanish intonation, special syntactical problems, and grammar/short readings. A general education course (humanities).

SPI 102 Elementary Spanish II $(3,1,4)$ Continuation of SPI 101. A general education course (humanities). PREREQ: For students who have completed SPI 101 or equivalent.

SPI 180 Elementary Individual Programmed Instruction in Spanish (1,0,1) Individual work for students desiring additional instruction in grammar, pronunciation, vocabulary and cultural topics. May be repeated once for credit. PREREQ: SPI 101 or equivalent and consent of instructor.

SPI 201 Intermediate Spanish I $(3,0,3)$ Review and extension of basic language skills learned in SPI 101 and SPI 102; reading and discussion of cultural, linguistic, and literary subjects. A general education course (humanities). PREREQ: For students who have completed SPI 102 or equivalent.

SPI 202 Intermediate Spanish II $(3,0,3)$ Continuation of grammar review and enhancement of language skills begun in SPI 201; cultural and literary subjects. A general education course (humanities). PREREQ: For students who have completed SPI 201 or equivalent.

SPI 250 Business Spanish $(3,0,3)$ Spanish business terminology; practice in writing and translating business letters. For students majoring in business and other seeking to broaden their career opportunities. PREREQ: SPI 202 or equivalent.

SPI 280 Individualized Programmed Instruction in Spanish (1,0,1) Laboratory exercises for students desiring additional work in grammar, pronunciation, and vocabulary. May be repeated once for credit. PREREQ: SPI 201 or equivalent and consent of instructor.

SPI 304 Spanish Composition and Conversation (3,0,3) Advanced practice in writing Spanish compositions and in oral conversation skills. PREREQ: SPI 202 or equivalent.

SPI 310 Spanish Culture and Civilization (3,0,3) Study of eras, institutions, and issues in the history and culture of Spain and the Iberian peninsula; readings primarily in Spanish. PREREQ: SPI 202 or equivalent.

SPI 311 Spanish-American Culture and Civilization (3,0,3) Eras, institutions, and issues in Spanish-speaking countries of Central and South America; the Hispanic presence in the United States; readings primarily in Spanish. PREREQ: SPI 202 or equivalent.

SPI 320 Survey of Peninsular Spanish Literature (3,0,3) Overview of major authors and movements from the middle ages to the 20th century; readings in Spanish. A general education course (literature or humanities). PREREQ: SPI 202 or equivalent and 3 semester hours of literature.

SPI 321 Survey of Spanish-American Literature (3,0,3) Overview of major authors and movements from the 18th to the 20th century; readings in Spanish. A general education course (literature or humanities). PREREQ: SPI 202 or equivalent and 3 semester hours of literature.

SPI 322 Hispanic Drama $(3,0,3)$ Study of major authors and texts in the history of Spanish theater, including representative twentieth-century playwrights. Readings in Spanish. May be repeated when topics vary. PREREQ: SPI 202 or equivalent.

SPI 323 Hispanic Prose Fiction (3,0,3) Focus on novel, novella, or short story. May be repeated as topics vary. PREREQ: SPI 202 or equivalent.

SPI 350 Methods of Teaching Spanish $(3,0,3)$ Theoretical and practical considerations of teaching Spanish in secondary schools. Required of all students seeking teaching certification in Spanish. PREREQ: 6 semester hours of Spanish at the 300 level or above.

SPI 480 Studies in Spanish and Spanish-American Culture (3,0,3) Topics in culture and language of Spanish-speaking countries. May be repeated for credit when topics vary. PREREQ: 6 semester hours of Spanish on the 300 level or above or consent of instructor.

SPI 481 Studies in Spanish and Spanish-American Literature (3,0,3) Topics in literature, literary history, and literary theory. May be repeated for credit when topics vary. PREREQ: 6 semester hours of Spanish on the 300 level or above or consent of instructor.

SPI 499 Independent Study: Spanish (1-3,0,1-3) Readings in language and literature. PREREQ: consent of instructor.

SPI 520 Readings in Spanish $(3,0,3)$ Various literary, linguistic, cultural, and pedagogical topics. May be repeated for credit as topics vary. PREREQ: 300-level Spanish course.

## Social Work <br> SWK

SWK 105 Introduction to Social Services $(2,4,3)$ A community service, 40 hour experiential course designed to provide students interested in the social work program with an opportunity to test and evaluate their interest in working with people. An accompanying seminar focuses on analysis of the experience. Required of social work students; open to non-social work students.

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SWK 106 Introduction to Social Justice (3,0,3) Introduction to foundational concepts and ethical concerns in social justice studies. A general education course (race/gender).

SWK 203 Social Welfare in Contemporary Society $(3,0,3)$ The systematic study of major social problem areas: poverty, health, education, hunger, housing, sexism, and racism, and their implications for social welfare services. A critical and comparative analysis of society's response to human need. A general education course (social science).

SWK 303 Professional Interactional Skills (3,0,3) Basic components of effective communication in social work practice; interpersonal and interactional skills relevant to different types of relationships and systems with which social workers interact; guided communication experiences. PREREQ: Grade of C or better in SWK 105 and SWK 203. PREREQ: or COREQ: CMST 101. course restricted to Social Work majors.

SWK 304 Human Behavior and Social Environment I (3,0,3) This course focuses on the life states of infancy, childhood, and adolescence and provides a basic framework for developing and organizing knowledge of human behavior and the social environment. Social systems, life span and strengths approaches to understanding HBSE are introduced. The course includes theories and knowledge of biological, sociological, cultural, psychological, and spiritual development across the life span. The manner in which social systems promote or deter people in maintaining or achieving health and well-being are emphasized. Special attention is given to the impact of human diversity, discrimination and oppression on the individual's ability to reach or maintain optimal health and well-being. PREREQ: Grade of C or better in SWK 105 and SWK 203. Open to non-Social Work majors with consent of instructor.

SWK 305 Social Work Practice I $(3,0,3)$ Basic frame of reference for the understanding and practice of social work; various kinds of systems with which the social worker interacts, types of relationships involved and essential generalist/ problem solving methodology and skills. PREREQ: Grade of C or better in SWK 105, SWK 203, SWK 303, and SWK 304. Course restricted to Social Work majors.

SWK 307 Human Behavior and Social Environment II (3,0,3) This course focuses on the life stages of young adulthood, middle adulthood, and later adulthood. The focus is on the interactions between and among individuals, groups, societies, and economic systems. Course content includes empirically based theories and knowledge and teaches biological and social science concepts concerning human development that are fundamental to social work practice. Special attention is given to the impact of human diversity, discrimination and oppression on the individual's ability to reach or maintain optimal health and well-being. PREREQ: Grade of C or better in SWK 105, SWK 203 and 304. Course open to non-Social Work majors with consent of instructor.

SWK 308 Social Work Research $(3,0,3)$ Needs assessment, case evaluation, and program evaluation; components of research design and statistics essential for understanding and carrying out these activities. PREREQ: Grade of C or better in SWK 105 and SWK 203, and SWK 204; and STA 110, 113 or 205. Course restricted to Social Work majors or with consent of instructor.

SWK 310 Social Work Practice 2: Famil and Group (3,0,3) Selected practice modalities applied to social work intervention in small systems, emphasizing families, and groups. Students learn to apply problem-solving approach, task centered casework, psychosocial model, and behavior modification to these small systems. PREREQ: Grade of C or better in SWK 105, 203, and 305. Course restricted to Social Work majors.

SWK 394 Topics: Social Welfare (1-3 sem. hrs.) A specific aspect of social work practice or social welfare concern. See Schedule of Classes for current topic and prerequisites.

SWK 405 Social Work Practice: Community Organization (3,0,3) Social work intervention in groups, organizations, and large systems; knowledge, skill, and appropriate worker role useful in working with neighborhood and community action groups and different types of organizations. Grade of C or better in SWK 105, 203 and 305. Course restricted to Social Work majors.

SWK 406 Field Instruction II $(2,16,5)$ Field placement of 16 hours per week in a community social service agency under supervision of professional staff;
increased ability to apply knowledge and skill to social work interventions. Participation in weekly seminar. PREREQ: Grade of C or better in SWK 105 and SWK 203. Course restricted to Social Work majors.

SWK 407 Social Welfare Policy $(3,0,3)$ Framework for analyzing social welfare benefits, beneficiaries, service delivery strategies, and financing from the perspective of various choices evolving in social welfare planning; evaluation of programs and services. PREREQ: Grade of C or better in SWK 105 and SWK 203. Course restricted to Social Work majors.

SWK 408 Field Instruction III $(2,16,5)$ Continuation of field placement of 16 hours per week in a community social service agency. Application to advanced knowledge and skill in social work intervention. Participation in weekly seminar. PREREQ: Grade of C or better in SWK 105 and SWK 203 and 406. Course restricted to Social Work majors.

SWK 411 Social Work and the Law $(3,0,3)$ The interrelationship of social work and the law; understanding the court system; testifying in court; legal services for low income people; legal regulation of social work practice; implications of significant issues involving the social worker.

SWK 499 Independent Study I (1-3 sem. hrs) Individual readings, research, or field-based course developed by the student in consultation with instructor and approved by social work chair prior to registration.

SWK 499 Independent Study II (1-3 sem. hrs.) Individual readings, research, or field-based course developed by the student in consultation with instructor and approved by social work chair prior to registration.

SWK 510 Child Abuse $(3,0,3)$ Historical and contemporary perspectives; etiology, assessment, and intervention; differential and complementary roles of professions; approaches to prevention and treatment.

SWK 515 Child Welfare I: Introduction to Child Maltreatment (3,0,3) Course designed to provide a comprehensive introduction to child abuse and neglect from a social work perspective. This course is the first of two specific course requirements for the child welfare certification available through Northern Kentucky University and the Department for Community Bases Services (DCBS).

SWK 516 Child Welfare II: Interventions (3,0,3) Course is second requirement for the Public Welfare Certification. Students will learn about various practice skills and treatment interventions related to social work with abused/neglected children and their families. Students will have several opportunities to develop their own skills through a variety of teaching methods. PREREQ: Acceptance into social work program and PCWCP project.

SWK 520 Services to Women $(3,0,3)$ Impact of the feminist movement on the delivery of services and the development of assertiveness training, peer counseling, and self-help.

SWK 525 Substance Use and Abuse ( $3,0,3$ ) Various categories of drugs; treatment and rehabilitation programs; ways of developing and implementing drug education programs.

SWK 545 Mediation in Social Welfare $(3,0,3)$ Course defines the process of mediation, the history and development of mediation, and examines theories around conflict resolution and negotiation. Course also explores the use of mediation in social work, domestic, commercial, educational, and other settings. Within each of these contexts, laws, social work ethnics, gender considerations, psychology, sociology, and cultural diversity will be explored.

SWK 594 Topics: Issues in Social Welfare (1-3 sem. hrs.) A specific aspect of social welfare practice or social welfare concern. See Schedule of Classes for current offerings and prerequisites.

## Statistics <br> STA

STA 110 Introductory Probability $(3,0,3)$ Enumeration techniques and probability theory. A general education course (mathematics). PREREQ: C or better in MAH 099 or placement.

STA 113 Introduction to Probability and Statistics ( $3,0,3$ ) Probability; basic counting techniques; graphical descriptive methods; numerical descriptive methods; normal distribution; sampling distribution of a proportion; estimation of a proportion. Not open to students who have completed both of MAT/STA 110 and STA 205, or both of MAT/STA 110 and STA 212, or STA 250 or STA 314. A general education course (mathematics). PRERQ: $C$ or better in MAH 099 or placement.

STA 205 Introduction to Statistical Methods $(3,0,3)$ Graphical descriptive measures; numerical descriptive measures; probability; hypothesis testing, estimation; analysis of variance; chi-square; regression; analysis by means of statistical software. Credit is not given for both STA 205 and STA 212. Not open to students who have completed STA 250 or STA 314. A general education course (mathematics). PREREQ: $C$ or better in MAH 099 or placement.

STA 212 Statistics for Business Applications I $(3,0,3)$ Concepts of statistical description and inference and their use in business decision making; measures of central tendency and variability; hypothesis testing; estimation; linear regression and correlation; use of statistical software. Credit is not given for both STA 205 and STA 212. Not open to students who have completed STA 250 or STA 314. A general education course (mathematics). PREREQ: C or better in MAH 099 or placement.

STA 213 Statistics for Business Applications II $(3,0,3)$ Further development of key topics in STA 212; multiple regression; time series; contingency tables; decision theory; use of statistical software. PREREQ: C or better in STA 212.

STA 250 Probability and Statistics I $(3,0,3)$ Introduction to probability and statistics; discrete distributions, continuous distributions, sampling distributions, estimation and hypothesis testing. PREREQ: C or better in MAT 129 or COREQ: MAT 227.

STA 312 Elementary Survey Sampling (3,0,3) Describing sets of data; estimation; elements of survey samples; single random, stratified, cluster, and systematic sampling methods; ratio and regression estimation; sampling from wildlife populations. Students will be required to conduct and analyze an actual survey. PREREQ: C or better in STA 205 or STA 212 or STA 250 or STA 314.

STA 314 Design and Analysis of Experiments I (3,0,3) Analysis of variance and experimental design; multiple comparison techniques; factorial experiments, regression, use of programmed routines. PREREQ: C or better in STA 205 or STA 212 or STA 250.

STA 315 Design and Analysis of Experiments II (3,0,3) Random and fixed effects models; nested designs, split plot designs; multiple regression; analysis of covariance. PREREQ: $C$ or better in STA 314.

STA 340 Probability II $(3,0,3)$ Further study of topics in STA 250; multivariate distributions, approximations, functions of random variables; additional topics. PREREQ: C or better in STA 250 and MAT 228 or MAT 229.

STA 341 Statistics II $(3,0,3)$ Further study in statistics topics introduced in STA 250. Topics include confidence intervals and hypothesis testing, one-factor analysis of variance, simple linear regression, chi-square analyses, and nonparametric tests. PREREQ: C or better in STA 250.

STA 370 Introduction to Statistical Consulting (1,6-9,3) Supervised application of statistical methods to real research problems in the Burkardt Consulting Center (BCC); readings and discussions on statistical consulting opics; attend meetings with clients of the BCC, manage data, analyze data, and produce summary reports under faculty supervision. PREREQ: consent of instructor and a C or better in STA 314 or STA 341.

STA 394 Intermediate Topics: Statistics (3,0,3) Various topics in Statistics. PREREQ: Varies with topic (see Schedule of Classes).

STA 399 Intermediate Directed Readings (1-3 sem. hrs) PREREQ: consent of instructor.

STA 470 Supervised Statistical Consulting (1,6-9,3) Continuation of STA 370; more active involvement in consulting projects; completion of a major oral presentation. PREREQ: Grade of P in STA 370.

STA 494 Advanced Topics: Statistics $(3,0,3)$ Various topics in Statistics. PREREQ: Varies with topic (see Schedule of Classes).

STA 499 Advanced Directed Readings (1-3 sem. hrs.) PREREQ: consent of instructor.

STA 594 Topics: Statistics $(3,0,3)$ Topics in statistics. Topics vary. PREREQ: varies with topic (see Schedule of Classes).

## Theatre <br> TAR

TAR 100 Theatre Appreciation (3,0,3) All aspects of theatre; development of understanding and application from the audience's point of view. Not applicable to major in theatre arts. A general education course (fine arts or humanities).

TAR 102 Survey of Race and Gender in Dramatic Literature (3,0,3) Discussion and analysis of race and gender issues faced by individuals or families in drama. A general education course (race/gender).

TAR 104 Introduction to NKU Theatre and Dance (1,0,0) An introduction to Theatre and Dance at Northern Kentucky University. Exploration of the different disciplines of theatre and dance available at NKU, as well as career possibilities, in performance, dance, and production. Required of all TAR and DAN majors and minors.

TAR 110 Acting I $(3,0,3)$ Basic principles and techniques.
TAR 111 Creative Expression through Acting (3,0,3) History, theory and practice tracing the development of the human utilization of acting as a cultural tool within an historical perspective. A general education course (fine arts or humanities).

TAR 114 Voice Development for the Actor I (3,0,3) Speech development as related to theatre; elimination of regional accents; introductory work with the International Phonetic Alphabet.

TAR 118 Stage Appearance (3,1,3) Basic principles of stage makeup and elements of costumes as used for the stage.

TAR 130 Musical Skills for the Musical Theatre Actors I (3,0,3) Introduction to basic reading and understanding of musical concepts specific to vocalists; strong focus on the unique demands of the musical theatre.

TAR 160 Stagecraft $(2,0,2)$ Basic elements of scenery construction: overview of theatrical production emphasizing practical application COREQ: TAR 160L.

TAR 160L Stagecraft Laboratory (0,2-4,1) Practical application of elements acquired in TAR 160. COREQ: TAR 160.

TAR 165 Comparative Arts $(3,0,3)$ Comparative study of the evolution of the fine arts as influenced by political-socio-economic conditions. A general education course (fine arts).

TAR 210 Acting II (3,0,3) Additional development of acting techniques and perceptions; greater emphasis on scene work and character development. PREREQ: TAR 110.

TAR 211 Special Topics in Theatre (1-3, 0, 1-3) Introduction to specialized theatre areas of study. May be repeated up to 9 hours.

TAR 213 Stage Combat I (3,0,3) Introduction to stage combat; hand fighting, quarterstaff, broadsword, and rapier and dagger; the stage fight in various periods and styles of dramatic literature. PREREQ: TAR 110.

TAR 225 Musical Theatre Performance I (3,0,3) Introduction to performance techniques; synthesis of voice, acting, and movement; beginning vocal technique as applied to musical theatre repertoire.

TAR 230 Musical Skills for Musical Theatre Actors II (3,0,3) Continuation of TAR 130 dealing with more advanced challenges in musical theatre repertoire. PREREQ: TAR 130.

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TAR 235 Vocal Techniques for the Singing Actor I (1,0,1) Private instruction focusing on viable methods for healthy musical theatre singing. May be repeated for credit (Musical Theatre B.F.A. students must repeat for credit).

TAR 260 Lighting Fundamentals (3,0,3) Practical exploration of the scientific principles and theories and practices of stage lighting, including electricity, optics, color theory, dimming and control systems. PREREQ: TAR 160.
TAR 262 Costume Construction $(2,0,2)$ Basic principles of costume building with opportunities for practical application in preparing costumes for university productions. COREQ: TAR 262L.

TAR 262L Costume Construction Laboratory (0,2-4,1) Practical application of skills and techniques acquired in TAR 262. COREQ: TAR 262.

TAR 265 Fundamentals of Theatrical Design $(3,0,3)$ Basic elements of design for theatre scenery, props, costumes, sound, and lighting; principles of aesthetics, script analysis, methods of research, development of visual concepts, graphic representations, and final evaluations. PREREQ: TAR 160.

TAR 277 Fundamentals of Sound Technology $(3,0,3)$ Sound reinforcement and sound production for the theatre; basic acoustics, audio components, terminology, recording/assembly techniques, and digital technology; skills necessary to mix sound and to troubleshoot sound systems. PREREQ: TAR 160.

TAR 310 Acting III $(3,0,3)$ Advanced acting techniques and considerations; detailed scene analysis and repertory building. PREREQ: TAR 210.

TAR 311 Auditions (3,0,3) Specialized techniques necessary for actors to relate to the auditioning experience; building an appropriate repertory of material, preparing the resume, and developing the "persona." PREREQ: at least two acting/ dance courses.

TAR 312 Voice Development for the Actor II $(3,0,3)$ Advanced speech development techniques and exercises as applied in performance situations; advanced work in Oral Interpretation and Readers Theatre. PREREQ: TAR 112.

TAR 313 Stage Combat II $(3,0,3)$ Advanced stage fighting techniques in various weapons and styles; study in history, terminology, and related dramatic literature; preparation for certification test with Society of American Fight Directors. PREREQ: TAR 213.

TAR 314 Stage Dialects $(3,0,3)$ Methods of producing convincing accents and dialects as an element of vocal characterization. Dialects studied may include: Standard British, Irish, Scottish, Cockney, French, German, American Southern, New York, and New England. PREREQ: TAR 114, TAR 312 and TAR 110.

TAR 315 Voice Development for the Actor II (3,0,3) Advanced speech development techniques and exercises as applied in performance situations; advanced work in Oral Interpretation and Teaders Theatre. PREREQ: TAR 114.

TAR 316 Acting Seminar I (2,4,2-6) Advanced acting coaching and repertory building; scene analysis and character work in relatively small groups for advanced students who have completed preliminary acting training. May be repeated for credit. PREREQ: TAR 310.

TAR 318 Advanced Stage Makeup $(3,0,3)$ Advanced techniques of stage makeup and wig and hair styling. PREREQ: TAR 118.

TAR 325 Musical Theatre Performance II $(3,0,3)$ Development of musical theatre repertoire for audition, study, and performance; synthesis of voice, acting, and movement; various musical theatre genres and historical styles. PREREQ: TAR 225.

TAR 335 Vocal Techniques for Singing Actor II $(1,0,1)$ Continuation of TAR 235 with a focus on expansion of repertoire and styles. May be repeated for credit. (Musical Theater B.F.A. must repeat for credit).

TAR 340 Playscript Analysis $(3,0,3)$ Systems of interpretation applicable to all types of dramatic literature necessary to production of plays and relevant for directors, actors, designers, and other practitioners.

TAR 343 Costume History $(3,0,3)$ Costume history from antiquity through the modern period as applied to production design; methods and courses of research
for design in theatre. PREREQ: TAR 100 or TAR 101, and TAR 160 or consent of instructor.

TAR 346 History of the Theatre and Dramatic Literature I ( $3,0,3$ ) History of significant developments in theatre and dramatic literature from pre-Greek times to the mid-15th century.

TAR 347 History of the Theatre and Dramatic Literature II (3,0,3) History of significant developments in theatre literature from the mid-15th century to 1875. PREREQ: TAR 346.

TAR 348 Theatre History and Society $(3,0,3)$ Survey of major historical developments in theatre and dramatic literature from pre-Greek times to the 20th century. Focus is placed on how society, culture and politics influence theatre production and vice versa. Does not satisfy degree requirements for theatre majors or minors. Available for registered Organizational Leadership majors only. PREREQ: ENG 101 or equivalent.

TAR 355 Musical Theatre Literature I (3,0,3) American musical theatre literature from late 19th century to mid-20th century; musical and dramatic movements that created American musical theatre. PREREQ: ENG 101.

TAR 360 Scene Design I $(3,0,3)$ Principles of design related to stage scenery; historical modes of stage design; 20th century stage decoration. PREREQ: TAR 160.

TAR 361 Design and Construction of Stage Properties and Special Effects $(3,0,3)$ Design skills and building techniques involved in props and effects for the stage. PREREQ: TAR 160.

TAR 362 Drafting for the Theatre (3,0,3) A lecture/project class that teaches the basic techniques and practices of drafting for the theatre. Projects require students to create typical working drawings for theatre productions utilizing industry standards. This course covers the use of mechanical and computer based techniques. PREREQ: TAR 160.

TAR 363 Lighting Design (3,0,3) A lecture/project course exploring art and science of theatrical lighting design. Projects teach students the mechanics and creative processes and theories used in creating lighting designs for the theatre. PREREQ: TAR 260.

TAR 364 Computer Graphics for the Stage $(2,1,3)$ Introduction to commonly used graphic and rendering programs. Exploration of projections, projectors and their use in theatre productions. PREREQ: TAR 160.

TAR 365 Costume Crafts $(3,0,3)$ Specific problems of costume decoration, draping, and projects for musical theatre and opera. PREREQ: TAR 262.

TAR 366 Costume Design I $(3,0,3)$ Application of principles of design to stage costuming; fabrics, figure drawing, and characterization. PREREQ: TAR 368 or consent of instructor; TAR 343 recommended.

TAR 367 Stagecraft II $(3,0,3)$ Advanced techniques and practices used in the construction and application of stage scenery. Topics include budgeting, welding, theatre machinery and equipment, shop organization, and advanced construction techniques. PREREQ: Tar 160.

TAR 368 Theatrical Rendering and Model Building (3,0,3) Techniques employed in sketching and preparing drawings for scenic and costume designs and in constructing models for scenic design. PREREQ: TAR 160.

TAR 370 Directing I $(3,0,3)$ Basic principles of play directing, play selection, casting, and rehearsal; direction and presentation of selected scenes in class. PREREQ: TAR 110 and TAR 160.

TAR 371 Theatre Management (3,0,3) Duties and responsibilities of those entrusted with areas like house management, public relations, and publicity in theatre activities. PREREQ: TAR 160.

TAR 376 Stage Management $(3,0,3)$ Duties and responsibilities of the theatrical stage manager. PREREQ: TAR 160.

TAR 377 Sound Design $(3,0,3)$ Design and aesthetic concerns, design process and techniques; playscript analysis, artistic and aesthetic choices, integrating music collaborative process; developing a common dialogue with the director and design team; sound graphics and design documentation including signal flow and system design. PREREQ: TAR 227.

TAR 380 Playwriting (3,0,3) Art and craft of writing dramatic material for stage presentation.

TAR 390-391 See TAR 490-491.
TAR 410 Styles of Acting (3,0,3) Major acting styles; practical application through presentation and evaluation of representative sciences and excerpted materials. PREREQ: TAR 310.

TAR 411 Special Problems in Theatre (Acting) (3-9,0,3-9) Opportunity for additional advanced work in the theatre student's area of concentration; multiple opportunities for performing artist's involvement in electives in specific areas of interest. PREREQ: TAR 310.

TAR 412 Internships in Professional Theatre (Performance) (3-6,0,3-6) Opportunities for outstanding students in theatre to accept apprenticeships carrying significant responsibilities in major professional theatre operations. The work will be coordinated with a theatre faculty adviser. PREREQ: permission of the chair of theatre.

TAR 414 NKU Tour Troupe (0,2-6,1-3) Touring performance troupes designed to represent the University in functions around the state and region. May be repeated for credit. PREREQ: audition.

TAR 415 The One Person Show (1,3,3) An introduction to the genre of the oneperson show. The course covers the various forms of monodrama. Students will create an outline for a full-length solo show and write and present an excerpt from it in performance. PREREQ: TAR 310 or consent of instructor.

TAR 416 Acting Seminar II (2,4,2-6) Advanced acting coaching and repertory building. Small group work for advanced students who have completed preliminary acting training. May be repeated for credit. PREREQ: TAR 310.

TAR 417 Acting Shakespeare $(3,0,3)$ Basic techniques for performing Shakespeare; practical application through ongoing scene work culminating in a oneperson presentation of material from Shakespeare's plays and sonnets. PREREQ: TAR 310 or consent of instructor.

TAR 418 Process and Production $(4,0,4)$ Rehearsal and presentation of a play for an audience within the framework of a laboratory/studio environment. Various rehearsal methods are explored, along with an in-depth examination of the play's literary, historical, and performance background. May be repeated for a maximum of 8 hours. PREREQ: TAR 110 and TAR 210 and TAR 310 and consent of instructor.

TAR 425 Musical Theatre Performance III $(3,0,3)$ Continuation of TAR 325; advanced techniques in specific areas of musical theatre performance including topical revue, auditioning, solo shows, and musical scenes. PREREQ: TAR 325 and consent of instructor.

TAR 441 Special Problems in Theatre (History, Theory, and Criticism) (3-$6,0,1-9)$ See TAR 411. PREREQ: two TAR Group III courses or consent of instructor

TAR 442 Dramatic Theory and Criticism (3,0,3) Major documents in dramatic theory and criticism from Plato and Aristotle to the present. PREREQ: consent of instructor.

TAR 443 History of Costume and Decor II $(3,0,3)$ Architectural, interior design, costume, and furniture history from Rococo through contemporary as applied to production design; methods and sources of research for design in theatre. PREREQ: TAR 343 or consent of instructor.

TAR 446 History of the Theatre and Dramatic Literature III (3,0,3) History of significant developments in theatre and dramatic literature from 1875 to present day. PREREQ: TAR 346 and TAR 347.

TAR 452 Special Problems in Theatre (Literature) (3-9,0,3-9) Opportunity for additional advanced work in the theatre student's area of concentration; multiple opportunities for performing artist's involvement in electives in specific area of interest.

TAR 455 Musical Theatre Literature II $(3,0,3)$ American musical theatre literature from mid-20th century to the present.

TAR 460 Scene Design II $(3,0,3)$ Advanced elements of design for the theatre; historical modes of stage design and advanced examination of design theories related to theatre practice. PREREQ: TAR 360.

TAR 461 Scene Painting $(3,0,3)$ Practical analysis and application of scene painting skills; materials (paints, dyes, fabrics) and equipment. PREREQ: TAR 160 or consent of instructor.

TAR 462 Costume Design II $(3,0,3)$ Advanced theory and techniques; special problems in musicals, operas, children's theatre, and non-traditional styles. PREREQ: TAR 366.

TAR 464 Special Problems in Theatre (Technology) (3-9,0,3-9) Opportunity for additional advanced work in the theatre student's area of concentration; multiple opportunities for performing artist's involvement in electives in specific areas of interest. PREREQ: two TAR Group IV courses or consent of instructor.

TAR 465 Advanced Lighting and Projections $(3,0,3)$ Advanced theory and technique in lighting design for theatre, opera, and dance; automated fixtures, imaging tools, and systems components. PREREQ: 9 semester hours of TAR technology and consent of instructor.

TAR 466 Costume Construction II (3,03,) Advance costume construction techniques, including pattern drafting, cutting, draping; practical application in preparation for university productions. Spring. PREREQ: TAR 262 or consent of instructor.

TAR 468 Advanced Scenic Art $(3,0,3)$ Advanced projects in painting, sculpting, lettering, and special materials in scenic art for the theatre. PREREQ: TAR 361.

TAR 470 Directing II $(3,0,3)$ Advance principles of directing; history of directing; problems encountered in directing period plays. PREREQ: TAR 370.

TAR 471 Summer Dinner Theatre (3 sem. hrs. each production) Active participation in major roles, both in performance and technology and in production of a university summer stock theatre operation. May be repeated for credit. PREREQ: permission of the chair of theatre.

TAR 473 Creative Dramatic/Children's Theatre $(3,0,3)$ Theory and practice of theatre as a teaching and learning experience; theatre for children. PREREQ: TAR 100 or TAR 101 and TAR 110 or TAR 111.

TAR 474 Special Problems in Theatre (Directing/Management) (3-9,3-9) Opportunity for additional advanced work in the theatre student's areas of concentration; multiple opportunities for performing artist's involvement in electives in specific areas of interest. PREREQ: TAR 370 and TAR 470, or consent of instructor.

TAR 477 The Business of Theatre $(1,0,1)$ Practical problems of working in the theatre; resume, union affiliation, use of theatrical agents, and additional professional training. PREREQ: senior status or junior status and consent of instructor.

TAR 480 Reviewing $(3,0,3)$ Essential of the research, backgrounds, and sources for criticism of performance events, including theatre, films, television, and dance. Students will write numerous critiques of dramatic events within the community. PREREQ: ENG 10;1 and ENG 291, or ENG 151.

TAR 481 Special Problems in Theatre (Playwriting/Criticism) (3-9,0,3-9) Opportunity for additional advanced work in student's area of concentration; multiple opportunities for performing artist's involvement in electives in specific areas of interest. PREREQ: BFA status.

TAR 482 Screenwriting $(3,0,3)$ Introduction to the elements of film script production and techniques involved in writing for the screen. Same as ENG 491. PREREQ: ENG 101 and ENG 291, or ENG 151; TAR 340 recommended.

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TAR 490-491, 390-391, 290-291, 190-191 Production Credits (0,2-4,1) Preparing for participation in college dramatic activities. May be repeated for a maximum of eight semester hours, all of which must be earned through active technical involvement of performance. PREREQ: TAR 160.

TAR 495 Senior Project (0,2-4,1) Individual senior project in theatre required for BFA students. Projects authorized, supervised, and graded by individually appointed faculty. Written agreement between student and faculty member must be submitted to chair before registration. PREREQ: senior BFA status.

TAR 498-499 Individual Studies in Theatre (1-3,0,1-6 each) Individual creative or research projects in one or more areas: playwriting, directing, acting, dance, stagecraft, scene design, costume design, lighting design, sound design, or theory/criticism. Projects directed by TAR faculty must be approved prior to registration. A maximum of 6 semester hours of individual studies may be applied toward a major in theatre arts. PREREQ: consent of chair of theatre.

## University Programs UNV

UNV 101 Orientation to College and Beyond (1-3 hrs.) Emphasis on transition into College and development of college survival skills, development of student self-reliance as an active participant in classroom activities, familiarization with available university resources and establishment of learning communities within the University.

UNV 301 University 101 Teaching Internship (3,0,3) Enrolled students will serve as teaching assistants in a University 101 class. Students will assist with class planning, make oral presentations on 101 topics, lead large and small group discussions, provide expertise and serve as role models for new students. Prerequisites: junior standing; minimum GPA of 3.0; instructor consent.

## Vocational Teacher Education VTE

VTE 199 Independent Study: Vocational Pre-Certification (1,15,3) Completion of Kentucky Teacher Internship and Kentucky Department of Education Management of Instruction workshop. Graded pass/fail. PREREQ: verification of eligibility by Kentucky Department of Education.

## Women's and Gender Studies WGS

WGS 150 Introduction to Women's Studies (3,03,0 Interdisciplinary and crosscultural readings on social, political, economic, and personal condition of women in a multi-ethnic society; complex ways of social construction of gender; interaction of gender, race, and class on women's lives. A general education course (race/gender perspective).

WGS 150H Honors Introduction to Women's Studies (3,03,0 Interdisciplinary and cross-cultural readings on social, political, economic, and personal condition of women in a multi-ethnic society; complex ways of social construction of gender; interaction of gender, race, and class on women's lives. A general education course (race/gender perspective).

WGS 310 Women, Wages, and Work (3,0,3) Interdisciplinary and multicultural examination of impact of gender, race, sexual orientation, and class on working women in the U.S.; past and present status of women's wages and opportunities; relationships between working women and their employers; cooperation and competition among working women from diverse background. PREREQ: sophomore standing. A general education course (race/gender perspective).

WGS 381 Women and Literature (3,0,3) Advanced readings and discussion of literary works by women or images of women in literature. May be repeated for credit when subjects differ.

WGS 382 Women and Society $(3,0,3)$ Readings and discussion in the general areas of women's contributions to major historical events, the history of women, or women's part in social movements or groups. May be repeated for credit when subjects differ.

WGS 383 Women and World Cultures $(3,0,3)$ Readings and discussion of the roles of women in individual world cultures; women's particular cultures in history or the challenges to women in the cultures of their careers in the modern world. May be repeated for credit when subjects differ.

WGS 384 Women, Nature, and the Inner Self $(3,0,3)$ Philosophical, spiritual or psychological aspects of women's lives and senses of identity; women caring for the environment; particular achievements by and challenges to women in the sciences and mathematics. May be repeated for credit when subjects differ.

WGS 385 Women and Human Care $(3,0,3)$ Readings and discussion in the general area of caring for the elderly or children; shaping non-sexist practices and behaviors in education; or traditional and alternative social, medical, or mental health services for women. May be repeated for credit when subjects differ.

WGS 386 Women and the Law $(3,0,3)$ Readings and discussion concerning women in law enforcement, the law, or politics; women as the victims of perpetrators of crime; modes of changing the law in issues affecting women. May be repeated for credit when subjects differ.

WGS 387 Women and the Arts $(3,0,3)$ Works representing women's achievements in theater, art, and music; problematic portrayals of women in the arts and in mass culture; protests through art of issues affecting women's lives. May be repeated for credit when subjects differ.

WGS 388 African-American Women's History and Culture (3,0,3) This discus-sion-oriented course is a history of African-American women that begins by examining African women and their cultures prior to European contact and ends with a look at women in the civil Rights Movement. This course satisfies AfroAmerican Studies history option. Same as HIS 438.

WGS 394 Topics $(3,0,3)$ Interdisciplinary and intensive study of a specific and significant topic in women's and gender studies. Topics vary from semester to semester. May be repeated for credit when subjects differ. See Schedule of Classes for current topic and prerequisites.

WGS 494 Seminar $(3,0,3)$ Theory and research practices characterizing women's and gender studies and their effect on traditional academic disciplines; designing research projects. Information and methodology from each discipline presented by women's studies faculty. PREREQ: completion of one women's and gender studies course.

WGS 499 Independent Study (1-3,0,1-3) Individual creative research, or community service projects directed by faculty members. Written agreement between faculty member and student must be submitted to director before registration; elements of agreement to include purpose, objectives, and evaluation procedures. May be taken twice for credit. PREREQ: completion of one women's and gender studies course.

WGS 594 Topics Women's Studies $(3,0,3)$ Advanced interdisciplinary study of a specific topic or issue of particular significance to women. May be repeated for credit when subjects differ.

## FACULTY

Acosta, Charles A., Associate Professor of Biology (2001). B.S., 1989, M.S., 1991, University of New Orleans; Ph.D., 1997, Old Dominion University.

Adams, Michael C., Regents Professor Emeritus of History (1972). A.B., 1966, University of Wales; M.A., Ph.D., 1973, University of Sussex.

Adams, Peg, Assistant Director, Office of First Year Programs (2003). B.A., 1986, Northern Kentucky University; M.A., 1996, Western Kentucky University.

Adams, Susan S., Professor Emeritus of English (1980). B.A., 1964, B.S., 1965, M.A., 1967, Ph.D., 1975, University of Cincinnati.

Agard, David B., Associate Professor of Statistics (1990). B.A., 1982, University of Virginia; M.S., 1985, Ph.D., 1990, Virginia Polytechnic Institute and State University.

Ahmed, Shamima, Associate Professor of Public Administration (1995). B.S.S., 1980, M.S.S., 1983, University of Dhaka; M.A., 1986, University of Akron; Ph.D., 1991, Virginia Polytechnic Institute and State University.

Akers, Wesley R., Lecturer in Communication (2006). B.A., 1996, Northern Kentucky University; M.A., 2005, Florida Atlantic University.

Alberti, John F., Professor of English (1991). B.A., 1981, University of Southern California; M.A., 1984, Ph.D., 1989, University of California, Los Angeles.

Albright, A.D., Professor Emeritus (1976). A.B., 1937, Milligan College; M.S., 1938, University of Tennessee; Ph.D., 1951 New York University.

Albritton, Matthew T., Lecturer Photography (2001). B.A., 1993, University of California at Santa Cruz; MFA, 2001, University of Texas at Austin.

Allameh, Seyed, Assistant Professor of Engineering Technology (2004). B.S., 1978, Sharif University of Technology; M.S., 1988, Wayne State University; Ph.D., 1993, The Ohio State University.

Allen, James G., Assistant Professor of Instructional Leadership (2007). B.S., 1991, M.Ed., 1994, Ed.D., 2003, University of Cincinnati.

Allen-Kattus, Kimberly, Associate Professor of Art/Art History (1993). B.A., 1976, Indiana University; M.A., 1981, University of Cincinnati; Ph.D., 1996, Union Institute.

Allred, Carol B., Professor Emeritus of Law and Director, Salmon P. Chase College of Law Library (1981). B.A., 1959, Newcomb College; M.A., 1960, Tulane University; M.S.L.S., 1971, Louisiana State University; JD, 1979, Georgetown University Law Center.

Allyn, Compton, Professor Emeritus of Management (1973). B.S., 1946, University of Virginia; M.B.A., 1949, Harvard University; M.Div., 1954, Episcopal Theological School; Ph.D., 1973, University of Cincinnati.

Almquist, Arne J., Associate Professor of Library Services and Associate Provost for Library Services (2001). B.F.A., June 1980, B.A., Sept. 1980, State University of New York at Buffalo; M.F.A., 1982, SUNYBuffalo; M.S.I.S., 1992, Ph.D., 2006, University of North Texas.

Altekruse, Michael K., Professor and Chair in Coundeling, Human Services and Social Work (2005). B.S., 1962, M.S., 1965, Ed.D., 1967, Indian University.

Amburgey, Valeria, Professor Emeritus of Education, Coordinator for Technology (1990). B.S. Ed., 1972, Stephen F. Austin State University; M.Ed., 1979, Ed.D., 1984, University of Houston.

Andersen, Barry, Professor of Art/Photography (1975). B.A., 1973, California State University, Northridge; M.F.A., 1975, University of Florida.

Anderson, Jan, Lecturer, Developmental Mathematics (1995). B.S., 1970, Miami University; M.A.T., 1971, Miami University.

Anderson, Margaret M., Professor of Nursing and Health Professions, Chair (1994). B.S.N., 1967, Indiana University at Indianapolis; M.Ed., 1972, University of Cincinnati; M.S.N., 1980, Wright State University; Ed.D., 1990, University of Cincinnati.

Arrighi, Barbara A., Professor of Sociology (1991). B.S., 1982, M.A., 1986, Ph.D., 1991, University of Cincinnati.

Artzer, Marjorie E., Associate Professor Emeritus of Education (1991). B.A., 1968, University of Nebraska, Omaha; M.A., 1972, George Peabody College for Teachers; Ph.D., 1990, Miami University.

Attenweiler, Bill, Assistant Professor of Psychology (2002). B.A., 1975, University of Maine at Orono; M.S., 2000, Clemson University, Ph.D., 2002, Clemson University.

Aufmann, Ronald G., Instructor, Department of Music (1999). B.M., 1981, Indiana University.

Baggett, Mary, Assistant Professor of Statistics (2003). B.S., 1975, University of South Carolina; M.S., 1980, University of Tennessee; M.S., 1994, Ph.D., 1997, Florida State University.

Bailey, Rebecca J., Assistant Professor of History (2006). B.A., 1988, College of William and Mary; M.A., 1990, Ph.D., 2001, West Virginia University.

Baker, Michael, Cooperating Assistant Professor of Accounting (1990). B.S., 1975, Northern Kentucky University; M.B.A., 1981, Xavier University.

Baldridge, Hildegard A., Lecturer Biological Sciences (2002). B.S., 1977, Eastern Kentucky University; Ph.D., 1983, University of Kentucky.

Bales, Richard A., Professor of Law (1998). B.A., 1990 Trinity University, JD, 1993, Cornell Law School.

Ball, P.J., Lecturer in Chemistry (2006). B.S., 2000, 2001, University of Cincinnati; Ph.D., 2005, University of Cincinnati.

Bardgett, Mark E., Professor of Psychology (2000). B.A., 1986, University of Missouri at St. Louis, M.A., 1989, Ph.D., 1991, University of Missouri at St. Louis.

Baranowski, Michael, Associate Professor of Political Science (2001). B.A., 1992, Baldwin-Wallace; M.A., 1995, Ph.D., 1997, University of Kentucky.

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Beasley, Fred M., Professor of Marketing (1992). B.A., 1978, University of Notre Dame; M.B.A., 1983, Oklahoma State University; Ph.D., 1993, University of Maryland.

Beere, Carole, A., Professor of Psychology and Senior Director, Special Projects (2001). B.A., 1966, Michigan State University; M.S., 1968, Ph.D., 1970, Michigan State University.

Beehler, John M., Professor of Accounting, Dean of the College of Business and Associate Provost for Economic Initiatives (2007). B.S., 1977, Pennsylvania State University; M.B.A., 1982, Indiana University; Ph.D., 1985, Indiana University.

Beetz, Virginia, Lecturer Department of Mathematics (2007). B.S., 1969, M.S., 1971, Morehead State University.

Belhabib, Katya Cherifa, Lecturer in History and Arabic (2007). License Es Lettres, 1977, University of Algiers, Algeria; M.A., 1982, Northern Kentucky University; Ph.D., 1989, University of Cincinnati.

Belland, Diana D., Professor of Music (1981). B.S., 1968, The Juilliard School; M.M., 1972, D.M.A., 1979, The Ohio State University.

Benedict, Dianne, Lecturer Nursing \& Health Professions (2004). B.S.N., 1999, Thomas More College; M.S.N., C.N.M., 2002, University of Cincinnati.

Benham, Liza Abram, Assistant Professor, Department of Political Science and Criminal Justice (2007). B.A., 1968, Bennett College; M.P.A., 1996, Columbus State University; Ph.D., 2006, Binghamton University.

Bennett, Donna S., Professor of Library Services and Assistant Director of User Services (1979). A.B., 1969, Wilmington College; M.S.L.S., 1970, University of Kentucky; M.A., 1974, University of Tennessee.

Beresford, Mary Jo, Lecturer in Theatre (1981). B.A., 1971, Edgecliff College; M.F.A., 1977, University of Cincinnati.

Bertog, Janet, Assistant Professor of Geology (2003). B.S., 1995, M.S., 1997, South Dakota School of Mines and Technology; Ph.D., 2002, University of Cincinnati.

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Bickers, John M., Assistatn Professor of Law (2006). A.B., 1985, Cornell University; J.D., 1991, University of Michigan; LL.M., 1999, The Judge Advocate General’s School, Army; LL.M., 2003, Georgetown University.

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Birkenhauer, Matt, Lecturer in Credit Continuing Education (2000). B.A., 1981, Thomas More College; M.A., 1986, University of Kentucky.

Bishop, David M., Professor of Education (1977). B.S., 1968, University of Rochester; M.Ed., 1973, University of Vermont; Ed.D., 1982, State University of New York, Buffalo.

Bishop, Paul D., Associate Professor of Psychology (1975). B.A., 1965, Lewis and Clark College; M.S., 1968, Ph.D., 1972, Ohio University.

Blackburn, Judith, Professor Emeritus of English (1979). B.A., 1960, Ohio Wesleyan University; M.A., 1968, Ed.D., 1978, University of Cin-
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Bowers, Thomas, Assistant Professor of English (2005). B.A., 1997, Cleveland State University; M.A., 1999, University of South Carolina; Ph.D, 2005, Iowa State University.

Bowling, Bethany V., Assistant Professor, Department of Biological Sciences (2007). B.A., 2002, Thomas More College; M.S., 2004, Ph.D., 2007, University of Cincinnati.

Boyce, Richard L., Associate Professor of Biology (2002). B.A., 1981, Williams College; M. For. Sci., 1985, M.S., 1986, Ph.D., 1990, Yale University.

Boyd, Stephen D., Professor of Speech (1972). B.A., 1966, David Lipscomb College; M.S., 1967, Kansas State College, Pittsburgh; Ph.D., 1972, University of Illinois; Certified Speaking Professional, 1990.

Braden, Bart, Professor Emeritus of Mathematics (1971). B.A., 1962, Washington State University; M.A., 1964, Yale University; Ph.D., 1966, University of Oregon.

Bratcher, Perry, Associate Professor of Library Services (1983). B.M.E., 1980, M.S.L.S., 1983, University of Kentucky; M.B.A., 2002, Northern Kentucky University.

Bratton, Robert M., Professor Emeritus of Law (1978). A.B., 1959, Ohio Wesleyan University JD, 1964, Salmon P. Chase College of Law.

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Cantrell, Margaret, Professor Emeritus of Education (1970). B.S., 1959, M.S., 1960, Kansas State University; Ph.D., 1968, The Ohio State University.

Carpenter, Jerry H., Professor Emeritus of Biology (1970). B.S., 1967, M.S., 1968, Utah State University; Ph.D., 1970, University of Kentucky.

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Chavez, Annette Thomas, Professor Emeritus of Education (1972). B.A., 1960, Brescia College; M.A., 1961, Ph.D., 1964, Catholic University of America.

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Code, Kimberly P., Associate Professor of Education (2002). B.A., 1994, Purdue University; M.A., 1995, Northern Kentucky University; Ph.D., 2002, University of Louisville.

Cole, David, Assistant Professor of Music (2003). B.M., 1983, West Virginia University; M.S., 1985, University of Iowa; M.M., 1988, Baylor University; D.M.A., 2003, University of Arizona.

Collier, Robert E., Professor Emeritus of English (1970). B.A., 1954, Morehead State University; M.A., 1961, Ph.D., 1970, University of Kentucky.

Collins, Michael F., Lecturer in Mathematics (2000). B.S., 1972, University of Kentucky; M.S., 1976, Xavier Univeristy.

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Connelly, Patricia R., Lecturer II in Developmental Mathematics (1993). A.B., 1959, College of Mt. St. Joseph on the Ohio; M.Ed., 1961, Xavier University; M.A.T. 1988, Miami University.

Conrad Redden, Aprile, Lecture/Retention Specialist (2005). B.S., 1990, M.P.A., 1996, Northern Kentucky Univeristy.

Cook, Christopher, Assistant Professor of Education (2004). B.S., 1995; M.S., 2001, Appalachian State University; Ph.D., 2004, University of North Carolina, Greensboro.

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Corcoran, Kevin J., Professor of Psychology and Dean of College of Arts and Sciences (2006). B.A., 1980, LaSalle College; M.A., 1982, Ph.D., 1984, University of Connecticut.

Cornuelle, Andrea J., Associate Professor and Director of BHS Program School of Nursing \& Health Professions (1982). B.H.S., 1981, M.S.Ed., 1982, University of Kentucky.

Cowan, Richard, Lecturer in Music (2003). B.M., 1981, Indiana University.

Coy, Doris R., Associate Professor Counseling, Human Services, and Social Work (2006). B.S., 1963, University of Rio Grande; ;M.S., 1966, Ohio State University; Ph.D., 1996, Ohio State University.

Crawford, Wanda J., Lecturer II, Learning Assistance Program (1995). B.A., 1984, Doane College; M.A., 1987, Miami University.

Cudjoe, Karen J., Adjunct Professor of Afrian American STudies (1999). B.A., Psychology, 1984, M.Ed., 1991, Ed.D, 2001, University of Cincinnati.

Cullick, Jonathan S., Associate Professor of English (2001). B.A., University of Houston, 1986; M.A., Marquette University, 1990; Ph.D., University of Kentucky, 1997.

Cupito, Mary Carmen, Associate Professor of Journalism (2001). B.A., 1976, Rutgers College; M.A., 1981, New York University.

Curtin, Daniel J., Professor of Mathematics (1979). B.A., 1973, University of Notre Dame; Ph.D., 1979, University of North Carolina.

Curtis, Kent, Professor of Organizational Leadership (1970). A.B., 1961, Centre College; M.Ed., 1965, Xavier University; Ed.D., 1976, University of Cincinnati.

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Dalakas, Vassilis, Associate Professor of Marketing (2004). B.A., 1992, Hanover College; M.A., 1994, Indiana University; Ph.D., 1999, University

Dallmer, Denise, Associate Professor of Education (1999). B. A., 1978, Miami University; M.A., 1989, Ph.D., 1992, The Ohio State University.

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Datta, Y., Professor Emeritus of Accounting (1973). B.A., 1953, Panjab

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De Blasio, Gregory G., Assistant Professor of Public Relations (2004). B.A., 1976, William Patterson University; M.A., 1978, Pennsylvania State University; Ph.D., 2005, Wayne State University.

DeForest, Eric, Assistant Professor of Music (2005). B.M., 1995, State University of New York at Fredonia; M.M., 1997, West Virginia University; D.M.A., 2004, University of Texas.

Deiter, Anthony, Assistant Professor of Media Informatics (2007). B.F.A., 1997, Arizona State University; M.F.A., 2000, University of Wisconsin, Madison.

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Desai, Tripta, Professor of History (1968). B.A., 1957, M.A., 1959, University of Delhi; Ph.D., 1979, University of Indore.

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Detmer-Goebel, Emily, Assistant Professor of English (2003). B.A., 1983, Wright State University; M.A., (Theatre), 1985, Miami University, M.A. (English), 1992, Ph.D, 1997, Miami University.

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Dunevant, David L., Associate Professor of Music, (1986). B.M.E., 1974, Murray State University; M.M., 1977, College-Conservatory of Music, University of Cincinnati.

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Dynan, Linda, Assistant Professor of Economics (2004). B.A., 1986, University of Pennsylvania; M.A., 1991, Ph.D., 1994, Colunbia University.

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Ferrante, Joan, Professor of Sociology (1988). B.S., 1977, Northern Kentucky University; M.A., 1978, Ph.D., 1984, University of Cincinnati.

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Gamble, Tom, Instructor and Director Sports Business Program (2002). B.A., 1986, Northern Kentucky University; M.Ed., 1993, Xavier University.

Gardella, J. Ronald, Professor Emeritus of Education (1975). A.A., 1951, Monmouth College; A.B., 1958, University of Pennsylvania; M.Ed., 1969, Rutgers University; Ph.D., 1975, Southern Illinois University.

Garns, Rudy L., Associate Professor of Philosophy (1989). B.A., 1979, Western Maryland College; M.A., 1983, Northern Illinois University; Ph.D., 1989, Syracuse University.

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Giesmann, Larry A., Professor of Botany (1972). B.A., 1966, Susquehanna University; Ph.D., 1972, University of Kentucky.

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Gilson, Richard L., Associate Professor of Management (2001). B.S., 1987, Weber State University; M.S., 1995, Utah State University; Ph.D., 2002, University of Nebraska, Lincoln.

Goddard, Perilou, Professor of Psychology and Chair (1990). B.S., 1981, Texas A\&M University; Ph.D., 1987, Indiana University.

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Gonnella, Jerome, Lecturer in Business Informatics (1993). A.S., 1976, University of Cincinnati; B.S., 1977, University of Cincinnati; M.B.A., 1985 University of Cincinnati.

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Mattson, Gary A., Associate Professor of Public Administration (2004). B.A., 1969, SUNY Albany; M.P.A., 1976, John Jay College; M.C.P., 1978, University of Rhode Island; Ph.D., 1983, University of Delaware.

Mauldin, Rosetta J., Professor Emeritus, Social Work and Human Services (1977). B.S., 1957, Hampton Institute; M.S.W., 1968, Ph.D., 1990, The Ohio State University.

May, Bonnie, Lecturer in History (1999). B.A., 1969, University of Kentucky; B.A., 1997, Northern Kentucky University; M.P.A., 1975, Eastern Kentucky University; M.A., 1999, Northern Kentucky University.

Mazanec, Kamilla M., Professor Emeritus of Law (1974). A.B., 1955, Washington University; JD 1960, University of Missouri, Kansas City; LL.M., 1964, Yale University.

McCarthy, Wanda, Lecturer Psychology (1999). B.S., 1983, Virginia Commonwealth University; M.S., 1993, University of Pittsburgh; Ph.D., 1997, University of Pittsburgh.

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## KENTUCKY RESIDENCY POLICY

## RESIDENCY POLICY (excerpts)

The following information is for general information only and is not meant to be anything other than an example of the governing documents pertaining to the establishment of Kentucky residency. This does not supplant the legal document that details the exact nature of residency which can be found at: http://www.cpe.state.ky.us/policies/ policies_student_residency.asp.

The State of Kentucky will assume you are NOT a resident if:

1. You had an out-of-state address on your application for admission;
2. You moved into Kentucky primarily to enroll in the university;
3. You moved into Kentucky and, within 12 months of that move you have enrolled at a Kentucky institution for more than the number of hours considered half-time;
4. You have been in continuous absence from the state for one year.

You can challenge your status designation by presenting proof among other documents that you have:

1. accepted a full-time job or transfer to an employer in Kentucky, Greater Cincinnati, or nearby Indiana while moving your domicile into the state of Kentucky;
2. lived in Kentucky continuously as a non-student for 12 months before the semester in which you plan to enroll;
3. prepared an income tax form that shows a change of address or the payment of Kentucky withholding taxes for the calendar year;
4. been employed full-time for 1 year while living in Kentucky;
5. obtained a professional license or certification in Kentucky;
6. paid real property taxes in Kentucky;
7. owned real property that was used by you as a residence before the date of application for a determination of residency status;
8. obtained a long-term lease of at least 12 consecutive months of non-collegiate housing;
9. married a Kentucky resident;
10. continued presence in Kentucky during academic breaks; and,
11. rely on a certain level of dependency on student financial aid in order to provide basic sustenance.

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[^0]:    *Students with an interest in majoring in one of these fields will be placed in a premajor status. Separate applications are required for athletic training, nursing, radiologic technology, and respiratory care. Please contact the appropriate program director for selective admission application.

[^1]:    Biology Core: see requirements presented earlier; a 2.50+ cumulative GPA required in all biology courses.

[^2]:    Fees:
    Applied music and composition:
    $1 / 2 \mathrm{hr}$. lesson per week $\$ 150.00$
    1 hr . lesson per week $\$ 300.00$

