This catalog is the official source of information about Morehead State University’s academic programs. Its purpose is to guide you in planning a course of study to meet program, department, and University requirements. See the index for an outline of the information provided.

The information in this catalog is current at the time of publication. If you are pursuing a degree and remain continuously enrolled in the University (excluding summers), you may complete a program according to the catalog requirements in effect at the time of your original enrollment.

If you are not continuously enrolled in the University and do not complete a bachelor’s degree within five years (three years for an associate degree), you may be required to meet the program requirements stipulated in a current catalog.

If you are a transfer student pursuing a bachelor's degree, the time allotted for degree completion under the catalog in effect at the time of your enrollment is based upon your classification at the time of transfer. For example, a sophomore transfer would have four years, a junior three years, and a senior two years. If you transfer above the freshman level and you are pursuing an associate degree, you have two years to complete the program under the catalog in effect at the time of your enrollment. The above limitations are based upon continuous enrollment.

Advisors, departments, and school offices make every effort to provide current information to students, but it is your responsibility to know the policies, regulations, and degree requirements that affect you.

For more information, contact the Office of the Provost, MSU, 205 Howell-McDowell Administration Building, Morehead, KY 40351; Phone: 606-783-2002.

Changes

Morehead State University reserves the right to change its academic regulations, policies, fees, and curricula without notice by action of the Kentucky Council on Postsecondary Education and/or the Morehead State University Board of Regents. Material included in this catalog is based on information available at the time of publication. The provisions of this listing do not constitute an expressed or implied contract between Morehead State University and any member of the student body, faculty, or general public. The provisions of this catalog are not to be regarded as an irrevocable contract between the student and the University. The University reserves the right to make and designate the effective date of changes in University policies and other regulations at any time such changes are considered to be desirable or necessary.

Equal Opportunity

Morehead State University is committed to providing equal educational opportunities to all persons regardless of race, color, national origin, age, religion, sex, sexual orientation, disabled veterans, recently separated veterans, other protected veterans, and armed forces service medal veterans, or disability in its educational programs, services, activities, employment policies, and admission of students to any program of study. In this regard, the University conforms to all the laws, statutes, and regulations concerning equal employment opportunities and affirmative action. This includes: Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Executive Orders 11246 and 11375, Equal Pay Act of 1963, Vietnam Era Veterans Readjustment Assistance Act of 1974, Age Discrimination in Employment Act of 1967, Sections 503 and 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act of 1990, and Kentucky Revised Statutes 207.130 to 207.240. Vocational educational programs at Morehead State University supported by federal funds include industrial education, vocational agriculture, business education, and the associate degree program in nursing. Any inquiries should be addressed to: Affirmative Action Officer, Morehead State University, 101 Howell-McDowell Administration Building, Morehead, KY 40351, 606-783-2097 or e-mailed to: affirmativeaction@moreheadstate.edu.

Printing

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Morehead State University

Morehead State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate, Baccalaureate, Master’s, and Specialist degrees, as well as the Doctor of Education. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call (404) 679-4501 for questions about the status of Morehead State University.
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Accreditation

- AACSB International - The Association to Advance Collegiate Schools of Business
- American Bar Association approval of Paralegal Studies
- American Veterinary Medical Association
- Commission on Accreditation of Allied Health Education Programs/Joint Review Committee on Education in Diagnostic Medical Sonography
- Committee on Education in Diagnostic Medical Sonography
- Commission on Collegiate Nursing Education
- Council on Social Work Education - Baccalaureate Level
- Committee on Education in Radiologic Technology
- Association of Technology, Management and Applied Engineering (formerly National Association of Industrial Technology)
- National Association of Schools of Music
- National Association of Schools of Theatre
- National Council for the Accreditation of Teacher Education
- National League for Nursing Accrediting Commission
- U.S. Army Cadet Command
- Masters in Psychology Accreditation Council, MPAC

Membership

- American Association of Colleges for Teacher Education
- American Association of Colleges of Nursing
- American Association of State Colleges and Universities
- American College Health Association
- American Council on Education
- American Registry of Radiologic Technologists
- American Technical Education Association
- Commission on Collegiate Nursing Education
- Conference of Southern Graduate Schools
- Council for the Advancement and Support of Education
- Council for Opportunity in Education
- Council on Collegiate Education for Nursing - Southern Regional Education Board
- Gulf Coast Research Laboratory
- International Technology Education Association
- Kentucky Academy of Science
- Kentucky Allied Health Consortium
- Kentucky Association of Baccalaureate and Higher Degree Nursing Programs
- Kentucky Association of College of Music Departments
- Kentucky Council of Associate Degree Nursing
- KentuckySpace
- National Association of Industrial Technology
- National Commission on Accreditation
- National Organization of Associate Degree Nursing
- National League for Nursing Accrediting Commission
- Ohio River Basin Consortium
- Southern Regional Education Board

Campus Buildings Abbreviations

Visit the following link for a complete listing of buildings abbreviations:
About the University
With a coeducational enrollment over 8,800 and a full-time teaching faculty of 374, Morehead State University offers 143 undergraduate degree programs and 21 pre-professional programs of study. MSU draws students from throughout the United States and several foreign countries to participate in its diverse academic and extracurricular life.

Strategic Plan
Adopted by the Morehead State University Board of Regents, June 2006. Click the Strategic Plan for additional information.

Vision Statement
We aspire to be the best public regional university in the South.

Core Values
The University strives to exemplify these core values:
• PEOPLE come first and are encouraged to achieve their full potential;
• Commitment to SCHOLARSHIP, LEARNING, SERVICE and COMMUNITY ENGAGEMENT is embraced;
• EXCELLENCE is achieved through TEAMWORK, LEADERSHIP, INNOVATION, ACCOUNTABILITY and SHARED RESPONSIBILITY;
• DIVERSITY of people and thought is valued and celebrated; and
• HONESTY, INTEGRITY and TRUST will direct all that we do.

Mission Statement
We are a diverse community of learners committed to individual achievement, our mission is to:
• Educate students for success in a global environment;
• Engage in scholarship;
• Promote diversity of people and ideas; and
• Serve our communities to improve the quality of life.

Strategic Goals
• Academic Excellence
  How will MSU develop, deliver and maintain superior academic programs?
• Student Success
  How will support services fulfill student academic and cocurricular needs?
• Productive Partnerships
  How will we utilize partnerships to benefit the people, communities and economy within the MSU service region?
• Improved Infrastructure
  How will we effectively manage human, capital and fiscal resources?
• Resource Enhancement
  How will we maximize public and private revenue opportunities?
• Enrollment and Retention
  How will we reach optimal student enrollment and retention goals?
# Programs of Study

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Admission, Fees, Financial Aid and Housing

MyMoreheadState

MyMoreheadState is the entry way to the various online services that Morehead State University provides to students, faculty, and staff. MyMoreheadState can be located at this link: https://my.moreheadstate.edu/.

The following is the type of information that can be accessed at the MyMoreheadState portal:

Current Events at MSU
- Keep tabs on MSU news, events, and other important announcements.

E-mail and Online Courses
- Access the e-mail account as well as Blackboard, which serves as the online course delivery system.

Access Student Account Information
- Register for course sections, pay tuition, and enroll in an online "Protect Class Schedule" plan, view grades and more.

Admission

The admission of all undergraduate students into Morehead State University is administered by the authority of Undergraduate Admissions in the Office of Enrollment Services, which reflects and works within the context of the mission statement of the University and within appropriate state and federal guidelines and policies.

All applicants for admission are required to submit evidence of their prior educational experience and other supporting data for evaluation. The Office of Enrollment Services may request clarification of submitted documents and retains all documents as part of the student’s permanent record. The University reserves the right to deny admission (or to admit with certain restrictions) based on an evaluation of the student’s supporting data and a determination of immoral character or propensity for violent or other conduct similarly unacceptable for the unrestricted admittance into the University community. The Undergraduate Admission and Scholarship Application requires applicants to report all criminal convictions, other than minor traffic violations and juvenile offenses. To assess the suitability of such applicants to the University community and identify any special conditions for enrollment, the University has established a review process. Copies of the Review Process for Undergraduate Admission Applicants with Reported Criminal Convictions are available upon request in the Office of Enrollment Services. Preliminary admission decisions made by the office prior to receipt of all official and final documentation are temporary and are subject to change.

Students who do not meet the requirements for admission to either four-year or two-year degree programs may appeal for special consideration when past academic performance may not be indicative of the ability to do college-level work or when there may be errors in supporting documentation. Guidelines for the appeals procedure are available in Enrollment Services.

Requests for applications or questions concerning admission should be directed to Undergraduate Admissions, Office of Enrollment Services, Morehead State University, Morehead, KY 40351; telephone 606-783-2000, toll free 1-800-585-6781, fax 606-783-5038 or online at www.moreheadstate.edu. Students are encouraged to visit the campus to discuss intended programs of study. Visits may be scheduled weekdays between 8 a.m. and 4:30 p.m. and at other times by appointment.

Completion of admission requirements generally allows students to enroll in any program at Morehead State University. However programs such as nursing, imaging sciences, veterinary technology, and teacher education require additional procedures. Students wishing to pursue studies in these programs must submit appropriate application materials to each program separate from those required by Undergraduate Admissions. For additional information for entering these programs, consult with appropriate sections of the catalog or contact Undergraduate Admissions in Enrollment Services.

Requirements for admission for high school graduates, GED recipients, transfer students, returning students, international students, home-schooled students, special students, and students auditing courses are as follows:

Admission Index

The Admission Index is calculated as follows:
1. Multiply high school GPA (on a 4.0 scale) by 100;
2. Multiply ACT Composite score by 10 (SAT scores will be converted);
3. Add total GPA score and total ACT score. The result is the Admission Index score.

Unconditional & Conditional Admission

Unconditional Admission: If a first-time freshman applicant provides all required documentation and test scores with the application, has a 450 Admission Index or higher, a minimum ACT composite of 18 (or SAT equivalent), and meets all admission requirements, he or she will be admitted “unconditionally.”

Conditional Admission: First-time freshman applicants who fail short of the required 450 Admission Index but have at least 400 or fall short of the minimum 18 ACT composite but have at least a 14, can be provisionally admitted (refer to Provisional Studies Program). Students who do not meet the Pre-College Curriculum (PCC) requirements may be admitted with the condition that they satisfy their PCC requirements within 24 semester hours. Applicants who do not meet admission requirements may be admitted on “Probation” in certain circumstances. Students on pro-
Students admitted with conditions of successfully completing the Provisional Studies Program within the appropriate timeframe, successfully satisfying PCC requirements within 24 semester hours, and/or earning at least a 2.0 GPA in the subsequent semester who do not fulfill those conditions will have the conditional admission revoked and be dismissed from the University.

Students who are denied admission to Morehead State University may appeal the decision. They may schedule an interview with the Admissions Appeal Committee.

Undergraduate Admissions may admit students who were initially denied admission when special circumstances exist and where students can demonstrate their ability to matriculate at MSU.

Admission as a Freshman

High School Graduates. Students who are graduates of an accredited high school will be unconditionally admitted if they meet the PCC requirements established by the Kentucky Council on Postsecondary Education (for Kentucky residents), have a minimum Admission Index of 450, and a minimum ACT composite of 18 (or SAT equivalent). Those submitting SAT scores may be asked to provide ACT scores after enrollment.

To apply for admission, submit to Undergraduate Admissions in the Office of Enrollment Services: (1) a completed Undergraduate Admissions and Scholarship Application; (2) official ACT or SAT scores; (3) a high school transcript (and a final transcript after high school graduation); and (4) a one-time $30 undergraduate application fee. All applicants for four-year degree programs must meet the PCC requirements for unconditional admission to the University (unless exempted). Applicants who do not meet the PCC requirements are eligible to be admitted conditionally. Students who are admitted conditionally must take specified courses to satisfy PCC requirements. Removal of PCC deficiencies will be monitored by the Office of First Year Programs and Academic Services in University College. Associate degree applicants do not need to meet PCC requirements for admission but their PCC requirements will be assessed and removed.

Students who have an index of at least 400 and an ACT composite score of at least 14 may be provisionally admitted. The competency based Provisional Studies Program is administered by the Office of First Year Programs and Academic Services in University College and provides academic instruction and support services designed to assist students in meeting entry level requirements for admission to two-year or four-year degree programs.

Enrollment as a Provisional Studies student does not guarantee admission to degree programs at the University. For continued matriculation at the University, standards must be met within the first three semesters of full-time enrollment.

GED Recipients. General Education Development (GED) recipients will be considered for admission on the same basis as a high school graduate.

To apply for admission, submit to the Office of Enrollment Services: (1) a completed Undergraduate Admissions and Scholarship Application; (2) the GED scores; (3) the High School Equivalency Certificate; (4) official ACT or SAT results; and (5) a one-time $30 undergraduate application fee.

Admission as a Transfer Student

Morehead State University welcomes transfer students and offers services to facilitate the transfer to MSU.

Students are eligible for unconditional admission as a transfer student if their GPA is 2.0 or better on a 4.0 scale on at least 24 semester hours of college work, and they are in good standing at all previously attended institutions.

Applicants for transfer admission to four-year degree programs who did not complete the Kentucky Pre-College Curriculum (PCC) and who have completed fewer than 24 semester hours are eligible for conditional admission. Students admitted conditionally must take specified courses to remove PCC deficiencies. Removal of PCC deficiencies will be monitored by the Office of First Year Programs and Academic Services in University College. Students who have earned fewer than 24 semester credit hours must submit ACT or SAT scores and high school and college transcripts to facilitate appropriate advising and placement.

Students with a GPA lower than 2.0 on a 4.0 scale, may be considered for probationary admission. Transfer students admitted on probation will be monitored and will be expected to earn a 2.0 GPA at MSU during the first semester of attendance. Students who do not earn the 2.0 GPA will be subject to academic dismissal. Students academically dismissed have the right to appeal.

Transfer students who apply for admission with fewer than 24 semester hours of credit will be admitted subject to the same admission criteria as that of an entering freshman. In addition, any previous college work will be given consideration in the admission process.

To be admitted as a transfer student from other colleges and universities, students should submit to Admissions in the Office of Enrollment Services: (1) a completed Undergraduate Admissions and Scholarship Application; (2) transcript(s) from school(s) previously attended; and (3) a one-time $30 undergraduate application fee.

Baccalaureate Program Transfer Frameworks

Morehead State University fully supports the Block Transfer of Academic Credit Policies as defined by the Kentucky Council on Postsecondary Education. Transfer students bringing Block course certification to the University from other Kentucky public institutions can be assured that these certifications will be honored. Questions pertaining to the Block Transfer of Academic Credit Policies should be directed to the Office of the Registrar, Morehead State University, 201 Ginger Hall, Morehead, KY 40351, telephone 606-783-2008. For more information, visit the Registrar online at www.moreheadstate.edu/registrar/.

Transfer of Credits from Regionally Accredited Colleges

Credits earned from regionally accredited colleges or universities will be accepted for transfer.

Courses in which the grade is lower than "C" may not be transferred for credit in certain majors or areas of concentration. Consult the academic advisor. Transfer credit does not compute in the MSU GPA.
Transfer of Credits from Non-Regionally Accredited Colleges

All transfer credit from non-regionally accredited institutions will be individually evaluated by the dean of the college in which the student is seeking a degree. Transfer credit will be granted only when:

1. The student has completed a minimum of 12 semester hours at Morehead State University and achieved a minimum GPA of 2.0.
2. The course being transferred corresponds to one offered in the Morehead State University Undergraduate Catalog in effect at the time the transfer is sought.
3. The student has earned a grade of "C" or better in the course for which transfer credit is being sought.
4. The course was taught by an instructor whose academic credentials meet the Commission on Colleges (SACS) requirements (e.g., generally at least the master's degree in the teaching field with 18 graduate hours in the teaching field). Credit for transfer which was earned more than 10 years before transfer is sought may not be applicable to current degree or licensure requirements. For a review, see the dean of the college in which the transfer is sought.

Visit the following link for more detailed information regarding the transfer policy for both regionally and non-regionally accredited colleges:

Admission as a Returning Student

Students who discontinue enrollment at MSU for one semester (excluding summer terms), must submit a completed Undergraduate Admissions and Scholarship Application, along with the one-time undergraduate application fee of $30 if the fee has not been paid previously, to be readmitted to the University.

Students who have attended another institution since they last attended MSU must submit: (1) a completed Undergraduate Admissions and Scholarship Application, along with the one-time undergraduate application fee. International students should apply at least four months before the semester or term of enrollment. To assist in the proper placement of students in the areas of English, mathematics, science and social studies, all entering freshmen must take the ACT exam upon arrival unless valid ACT or SAT scores are on file. Entering transfer students with fewer than 24 semester hours of credit completed may be asked to take the ACT exam for the same reasons. Students with ACT subscores below 18 in English, 19 in mathematics, or 20 in reading must take one or more developmental classes in each subject to prepare for success in advanced coursework.

Students transferring to the University from an accredited institution of higher education in the United States, must submit: (1) the Undergraduate Admissions and Scholarship Application; (2) the Morehead State University Transfer Form available from International Student Services; (3) an official transcript from the institution from which they are transferring; (4) official verification of financial resources; and (5) a one-time $30 undergraduate application fee.

Transfer of Credits. Credits earned from international institutions will be considered only after they have been evaluated by the World Education Services Inc., Website: www.wes.org, mailing address: P.O. Box 11623, Chicago, IL 60611-0623, e-mail: midwest@wes.org. It is the student's responsibility to contact the agency and pay all service fees.

Students who have earned fewer than 24 semester hours must submit ACT or SAT scores and high school and college transcripts to facilitate appropriate advising and placement.

Pre-College Curriculum Requirements

English/Language Arts — four credits required: English I, English II, English III, English IV (or AP English).

Mathematics — three credits required: Algebra I, Algebra II, Geometry.*

Science — three credits required: Credits to include Life Science, Physical Science, and Earth/Space Science (with at least one lab course).


Health — one-half credit required.

Physical Education — one-half credit required.

History and Appreciation of Visual, Performing Arts — one credit required: History and appreciation of visual and performing arts or another arts course that incorporates such content.

Foreign Language — two credits required in same language or demonstrated competency.

Electives — seven credits required — (5 five rigorous). Recommended strongly: one or more courses that develop computer literacy.

Total Credits: 22 (17 required credits; seven elective credits).

* 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.

**Rigorous electives should have academic content at least as challenging as that in courses required in the minimum high school graduation requirements. These electives also should be in social studies, science, math, English and language arts, arts and humanities, foreign language and, above the introductory level, in agriculture, industrial technology, business, marketing, family and consumer sciences, health sciences, and technology education and career pathways. Electives in physical education and health are limited to one-half unit each.

Exceptions to the Pre-College Curriculum
The following shall be exempted from the requirements of the Kentucky Pre-College Curriculum:
1. Students who are 21 years of age or older at time of application;
2. Students entering baccalaureate degree status with 24 or more semester credit hours applicable to a baccalaureate degree with a GPA of at least 2.0 on a 4.0 scale;
3. Students who meet the ACT or SAT exemption scores in a subject;
4. Active duty military personnel, their spouses, and their dependents;
5. A student enrolled in an associate degree program;
6. Out-of-state students; or

The above is subject to approval by the Kentucky Council on Postsecondary Education.

When admitted, a student is locked into an associate degree program unless the student has an academic index of 450 or above.

Developmental Education Requirements
Developmental courses help many MSU freshmen succeed by providing preparatory classes in writing, mathematics, and reading. Students with ACT subscores below 18 in English, 19 in mathematics, or 20 in reading must take one or more of these preparatory classes. These requirements are based on the Kentucky College Readiness Standards. Any student who scores below the readiness standards will be required to take a placement test in each area of need. Information about placement testing is available through the MSU Testing Center, or on the University's Developmental Education website.

Incoming students who have two or more developmental course needs are encouraged to enroll in the Success Academy during the summer prior to their first academic year.

Students required to enroll in developmental classes must:
1. Earn a grade of "C" or better in required developmental courses.
2. Complete developmental requirements within the first 30 credit hours. Students who do not complete all developmental requirements within the first 30 credit hours must complete the required course(s) before enrolling in additional college-level courses or obtain a letter of exception from University College.
3. Developmental courses cannot be dropped from a student's schedule without the approval of both the advisor and University College.
4. Developmental courses are numbered below 100 and do not count toward the total hours needed for degree completion. However, the credit hours count toward full-time status each semester, and the grades are included in calculating GPA.

Admission as a Special Student
Students who wish to register for a particular course for credit but are not interested in working toward a degree may enter the University as a special student. Submit to Undergraduate Admissions a completed Undergraduate Admissions and Scholarship Application along with the one-time $30 undergraduate application fee. Special students are not eligible for financial assistance.

If special students later wish to pursue a degree, they may do so by completing the appropriate admission procedure. No more than 24 hours of coursework completed as a special student may be used to fulfill degree requirements.

Admission as an Auditor
Students who wish to audit a class need only submit to Undergraduate Admissions a completed Undergraduate Admissions and Scholarship Application and a one-time $30 undergraduate application fee. Although credit cannot be given for courses audited, such courses are recorded on the transcript. Tuition and fees are the same for auditing a course as they are for taking a course for credit.

Admission as a Visiting Student
Students currently attending another institution of higher education who wish to take coursework at MSU to complete degree requirements may be eligible for admission as a visiting student. Submit to Undergraduate Admissions: (1) the completed Undergraduate Admissions and Scholarship Application; (2) the Visiting Student Recommendation Form (completed by student's primary institution); and (3) a one-time $30 undergraduate application fee.

Admission as a High School Student
Students currently enrolled in high school as a junior or senior may be eligible for the MSU Early College program. This program allows qualified high school juniors and seniors to take MSU college courses at their high school or an MSU campus. The Early College has partnered with high schools, area technology centers and various educational foundations to provide this opportunity. A student must submit an Early College Registration form through the Office of Enrollment Services.

The registration form must include the student's high school transcript and ACT or ACT Plan scores. Students must have a minimum ACT composite score of 18 and a high school GPA to be admitted unconditionally to the Early College program. Area subscores from the ACT exam will be used for academic advising and appropriate placement in coursework.

Students without the qualifying scores may apply for developmental courses if those opportunities are provided at their individual high schools. Any exception to the requirements must have the approval of the Early College Office. Direct any ques-
When a service member presents documentation of Military Occupational Specialty (MOS) or other military credit to the Registrar and requests Morehead State University credit, the Registrar will route the request to the department chair of the service member’s program of study for evaluation until an equivalency list has been established.

**Monitoring:**
The University Undergraduate Curriculum Committee will review the procedure annually and recommend changes to the Provost and Vice President for Academic Affairs.

**Residency Requirements:**
Academic residency requirements will be up to 50 percent of the undergraduate degree program for service members.

**How to Pay Tuition and Fees**

**Housing**
All students who are not 21 years-old or have not completed 60 credit hours are required to live in campus housing. Those students commuting from their permanent home address must file a housing/dining waiver with the Housing Office. Upon approval, a student will be allowed to commute and not be responsible for housing/dining fees. A completed Application for Campus Housing should be submitted with a deposit to the Office of Student Housing. Assignments are made based on the date the housing application and deposit are received. The deposit is refundable ONLY if canceled in writing to the Office of Student Housing by July 1.

For current fee information and to access the On-Campus Residency Policy, contact the Office of Student Housing, Morehead State University, 150 University Blvd., Box 2525, Grotethompson Hall, Morehead, KY 40351, telephone 606-783-2060, fax 606-783-5062, or online at www.moreheadstate.edu/housing.

**Automobile Registration**
A valid Morehead State University parking permit is required for any motor vehicle and motorcycle operated on the campus. Registration information is available from the Traffic Office of the MSU Police Department, 100 Laughlin Health Building, 606-783-2020. http://www.moreheadstate.edu/police/index.aspx?id=193

**International Student Health Insurance Requirements**
MSU requires regularly enrolled international students, and those dependent family members living with them in the country, to have health and accident insurance that includes a repatriation benefit. A medical benefits plan for international students is offered through a contracted agent. International students must meet the insurance requirements to complete their enrollment at Morehead State University. The Office of Counseling and Health Services monitors compliance to this program and assists international students with questions relating to health insurance.

It is our experience that most health benefit policies students obtain in their home countries do not meet the minimum requirement of benefits required by the University. These requirements are a $250,000 medical benefit (per accident/illness), $50,000...
medical evacuation benefit, and a $25,000 repatriation benefit in addition to the policy maximum. For the University to consider a waiver of the insurance requirement, students must present an English translation of benefits with amounts converted to American currency from the insurance company. Premiums are paid on an annual basis.

Classification of Residence for Admission and Tuition Assessment Purposes

Residency for Fee Assessment Purposes

The Council on Postsecondary Education for the Commonwealth of Kentucky, in accordance with Section 164.020(8) http://www.lrc.ky.gov/KRS/164-00/020.PDF of the Kentucky Revised Statutes, has adopted the policy by which residency for fee assessment purposes is defined and determined. The policy is applied to determine a student’s eligibility for fees assessed Kentucky residents who enroll at any state-supported institution of higher learning in the Commonwealth of Kentucky. This determination is made at the initial time of enrollment. Every student who is not a resident of Kentucky as defined by the policy enacted by the Council on Postsecondary Education is required to pay nonresident registration and/or entrance fees.

Any student or prospective student in doubt concerning his or her residency status must bear the responsibility for securing a ruling by completing an Application for Student Residency Reclassification for Fee Assessment Purposes and returning it to Enrollment Services.

Procedure for Determination of Student Residency Status for Fee Assessment Purposes

To apply for a change of residency, a student must complete the Application for Student Residency Reclassification for Fee Assessment Purposes and submit it to Enrollment Services. The student will be notified of the residency status decision in writing.

If the student wishes to appeal the decision, he or she may do so by requesting an appeal in writing with the University’s Residency Review Committee. If the student wishes to appeal the decision of the Residency Review Committee, he or she may do so by requesting in writing that a copy of his or her file be submitted to the president of the Council on Postsecondary Education for referral to the Council’s Committee on Residency Review.

Tuition and Fee Information

Student Billing and Payment Information

Morehead State University does not send out paper bills. Students will receive electronic (e-bill) statements each month via their assigned MSU EagleMail as long as their balance has not been paid in full (by financial aid or by the student).

Students may also view and pay their bill online, (after July 15th for Fall semesters) by logging into MyMoreheadState via http://my.moreheadstate.edu and selecting "My Billing Info."

After acceptance to the University, students may establish an EagleMail address by visiting MyMoreheadState and selecting "Activate Account" under the "Trouble Logging In" Tab. It is the student’s responsibility to view their MSU EagleMail account on a regular basis.

Questions about costs may be answered by referring to the online Fee Schedule located on the Office of Accounting and Financial Services website at www.moreheadstate.edu/abc or by contacting the Office of Accounting & Financial Services at 606-783-2019. Tuition and fees are subject to change without notice by the Council on Postsecondary Education and the University’s Board of Regents. Morehead State University reserves the right to deny credit based on prior payment history.

Morehead State University reserves the right to deny credit based on prior payment history.

Protect Class Schedule Plans

When a student registers for classes they are creating a financial obligation to Morehead State University. The total semester charges (tuition, housing, meal plans, books and fees) less financial aid/scholarships/waivers or other outside source of assistance for each semester result in the amount due to MSU. All students are required to make payment in full or enroll in an online Protect Class Schedule plan before they arrive on campus to activate meal plans and prevent cancellation of class schedules.

MSU Offers Two "Protect Class Schedule" Plans

The Protect Class Schedule Plan options offered by Morehead State University are:

Protect Class Schedule - Standard Payment Plan

This plan protects class schedules for students with SOME or NO financial aid, scholarships, waivers, or other sources of assistance, who cannot pay their bill in full. This plan spreads payments over three months. One-third of the balance and a $50 installment payment fee are due at the time of enrollment.

This plan is available for Fall and Spring semesters only.

Protect Class Schedule - Financial Aid Plan

This plan protects class schedules for students with enough financial aid, scholarships, waivers or other sources of assistance to cover their entire balance in full. (Remaining balance must be paid in full first and then enroll in this plan to protect class schedules).

There is no installment payment fee to enroll in this plan. This plan is available for Fall, Spring, and Summer sessions.

Changes in financial aid, tuition, course fee(s), class changes, books, housing, meal plan or miscellaneous charges will automatically update the payment plan amounts due. Notification of these changes will be reflected in the billing statement and may result in an increase or decrease in the amount due for the month being billed. Students may, at any time, elect to pay an amount greater than the amount due on the billing statement or pay the balance in full.

- Fall semester – amount available for payment plan is divided into three payments due July/August (1st payment due at time of enrollment), September, and October.
- Spring semester - amount available for payment plan is divided into three payments due December/January (1st payment due at time of enrollment), February, and March.
• Summer sessions – payment is due in full at the start of each
summer session. (See Academic Calendar for deadline dates).
No standard payment plans are available for summer sessions.
• Students must register before the first day classes begin
to avoid a $75 late registration fee.
• Students must make payments as scheduled above to avoid a
late payment charge at the monthly rate of 0.65% on out-
standing balances and to avoid a hold being placed on their
account.

Refund Checks
A refund will be provided when payments (including financial
aid, scholarships, or other outside sources of assistance) exceed
total charges. Students may choose to have their refunds direct
deposited to the bank account of their choice. Direct deposit is
strongly encouraged for student convenience. To set up direct
deposit, login to MyMoreheadState and select ‘Bank Information
(Direct Deposit) located under Student Financial Information.
Refund checks will be direct deposited no earlier than two weeks
after classes begin. If direct deposit is not set up, checks will be
mailed to permanent home addresses. Federal regulations state
that for first time, first year borrowers of a Federal Direct Loan,
Direct Loan funds cannot be disbursed until 30 days after the first
day of classes.

Student Health Services
Counseling services are provided at no cost to students (under-
graduate and graduate). Students who visit the health clinic pay
no fee for routine health services.

Credit/Adjustments
Students withdrawing from school during any semester or term
must arrange for their withdrawal with the Office of the Registrar.
No credits will be given unless the withdrawal is made through
the proper channels. Tuition, housing, and course fees may be
credited to students’ accounts who withdraw during certain time
periods following the start of each term. Meal plans and mini-
imum Dining Club accounts may be credited in accordance with
the percentages listed below or the actual account balance,
whichever is smaller. All other fees are not adjustable. Cred-
it/adjustment periods and amounts are as follows:

Refund Policy
The following credit/adjustment policy is applicable for on-
campus students:

Fall or Spring Session Credit Adjustments
first six days of classes 100%
next five days of classes 75%
next five days of classes 50%
next five days of classes 25%
No credits are given after the first 21 class days of the semester.

Summer I and Summer II Sessions (Four week ses-
sions)
first two days of classes 100%
next two days of classes 75%
next two days of classes 50%
next two days of classes 25%
next two days of classes 25%

No credits are given after the first eight class days of the session.

Summer Intersession (Two week session)
first two days of classes 100%
next one day of classes 75%
next one day of classes 50%
next one day of classes 25%
No credits are given after the first five class days of the session.

Summer Session (Eight week session)
first four days of classes 100%
next two days of classes 75%
next two days of classes 50%
next two days of classes 25%
No credits are given after the first 10 class days of the session.
Creditable fees include tuition, housing, and course fees.
Visit the University Calendar for term.

Financial Options
The University offers a broad program of financial assistance to
eligible students in the form of grants, loans, scholarships, and
work.
In many cases, financial aid is made up of a combination of the
various types of assistance available (a financial aid package). Stu-
dents who have been admitted and are enrolled for credit in a
degree program are eligible for financial aid funds provided they
also meet all other requirements for aid. Financial assistance is
granted, depending on the availability of funds, to all eligible stu-
dents regardless of sex, race, color, or ethnic origin. About 90 per-
cent of the students attending MSU receive scholarships or other
financial aid.

The type and amount of financial aid is generally based on
demonstrated financial need, academic achievement, test scores,
and other talents and interests. Financial need is determined
through analysis of the Free Application for Federal Student Aid
(FAFSA). The FAFSA is analyzed to determine the expected contri-
bution of the student and/or parents toward educational expens-
es.

Students apply for financial aid by completing the FAFSA online
at www.fafsa.ed.gov by our priority date, March 15 for the coming
academic year or for the coming summer terms. Applying before
the priority deadline increases the chance of receiving financial
aid. Most financial aid is credited to students’ accounts, one-half
of the year’s awards for the fall semester and the other half for the
spring semester.

Federal regulations restrict the total amount of funds for which
students may be eligible. A student’s financial aid package, includ-
ing federal, state, private, and/or institutional aid, cannot exceed
MSU’s established “cost of attendance” for any given year. Stu-
dents who receive more than the amount for which they are eligi-
bly will be required to repay the amount of the over-award.

Over-awards can be avoided if the student will:
1. Check with the Office of Enrollment Services to see if the max-
imum needs have been met before applying other aid pro-
grams.
3. Make sure all resources are reported on the aid application.
4. Notify the Office of Enrollment Services of aid received from sources other than the Office of Enrollment Services.

**Selective Service Registration Requirement**

Male students must be registered with the Selective Service (if required to register) before they can receive Title IV student financial aid (Federal Pell Grant, Federal SEOG, Federal Workstudy, Federal Perkins Loan, Federal Direct Loan, Direct Plus Loan). Contact the Office of Enrollment Services at 606-783-2000 for more information.

**Satisfactory Academic Progress for Financial Aid Purpose Policy**

The Higher Education Act mandated institutions of higher education to establish minimum standards of "satisfactory academic progress" for students receiving financial assistance. This means that a student must make progress toward obtaining an appropriate degree or certificate during each term that the student is enrolled. These standards are applicable to all federal, state, and institutional aid programs administered by Morehead State University.

To continue to receive financial aid at MSU, a student must demonstrate satisfactory academic progress by completing a minimum number of the total hours attempted, and by also maintaining a minimum GPA. MSU's satisfactory academic progress schedule is as follows:

1. A student must successfully complete a minimum of 75 percent of the credit hours attempted during the last period of enrollment. Successful completion for this purpose is defined as receiving a grade of "D" or better.
2. If 1-16 hours have been attempted, a student must have at least a 1.6 cumulative GPA. If 17-32 hours have been attempted, a student must have at least a 1.7 cumulative GPA. If 33-48 hours have been attempted, a student must have at least a 1.8 cumulative GPA. If 49-67 hours have been attempted, a student must have at least a 1.9 cumulative GPA. If 68 or more hours have been attempted, a student must have at least a 2.0 cumulative GPA.
3. A student has attempted no more than 192 undergraduate hours for a bachelor's degree, or no more than 96 hours for an associate degree.

**Policies and Procedures**

The specific policies and procedures to be used in applying the satisfactory progress standards are outlined below:

1. Satisfactory progress will be evaluated at the end of each spring semester.
2. Hours attempted for purposes of this policy will be defined as those for which a student receives a grade of A, B, C, D, E, F, I, IP, K, N, R, U, W, WP, or WF.
3. For undergraduate students, grades of E, F, I, IP, N, R, U, W, WP, and WF will not qualify as successful completion of hours attempted. Noncredit remedial courses, courses taken for audit, and courses in which grades of K or P are received are not figured in the calculation of a student's GPA.
4. If otherwise eligible, students will be given financial aid during a term in which they may be repeating a course.
5. A student who fails to maintain satisfactory progress as defined will not be permitted to receive federal, state, or institutional financial aid.

**Procedures for Appeal for Financial Aid by Students Who Fail to Maintain Satisfactory Progress Standards**

Students who fail to meet satisfactory progress standards, as defined, may appeal the ruling to the Office of Enrollment Services if they believe extenuating circumstances led to their failure to maintain satisfactory progress. Those desiring to appeal must do so in writing on the Unsatisfactory Academic Progress Appeal for Student Financial Aid form and must attach supporting documentation. Copies of the appeals form may be obtained in the Office of Enrollment Services or online at www.moreheadstate.edu/finaid. Students will be notified in writing of the action taken on their appeals. Financial aid eligibility will be reinstated for all students whose appeals are approved.

**Reinstatement of Financial Aid Eligibility**

Students who do not appeal or have an appeal denied can regain eligibility for financial aid for a subsequent academic term (fall, spring, or summer term) at his or her own expense, satisfying the satisfactory progress definition.

**Scholarships**

Students who have been admitted to MSU should refer to the MSU scholarship search site, available at http://www.moreheadstate.edu/scholarships for current information about scholarships.

**Financial Aid**

**Grants.** Repayment is normally not required for the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (SEOG), or College Access Program Grant (CAP). To be considered for these grants, you must complete the FAFSA and the MSU Student Financial Aid Personal Data Sheet. Request forms from the Office of Enrollment Services or any high school guidance counselor.

- **Federal Pell Grant.** A federally-funded program; eligibility and amount are determined by a standard financial needs analysis formula.
- **Federal SEOG.** A federally-subsidized award based on need.
- **CAP Grant.** A state program based on need.

**Work-Study Programs.** The work-study programs provide work in a variety of offices and departments at the University. Students may apply for open positions by submitting an application and resume on JobLinks at www.moreheadstate.edu/finaid. The federal work-study program is designed to provide part-time employment for undergraduate and graduate students with documented financial need. To apply, students must be enrolled in at least six hours per semester and must maintain eligibility by earning at least 10 hours per academic year. Students must also maintain satisfactory academic progress.

- **Federal Work-Study Program** (FWS). A federally-subsidized program based on need.
- **Institutional Work-Study Program** (IWSP). Sponsored by the University, this program is geared to students with specific skills, talents, or experience.
Financial Aid and Fee Terminology

The following terms are important:

**Census date** is normally the last day to add a full semester class per the University Academic Calendar. Enrollment on the census date determines eligibility and amounts for financial aid awards.

**Financial aid package** is a combination of different types of financial aid that may make up an award.

**Full time** refers to enrollment for 12 credit hours or more during the fall, spring or summer semester.

**Grant** is a type of aid that generally requires no repayment. Eligibility is based on calculated financial need.

**Loan** is a type of aid that must be repaid, generally after the student is out of school. These low-interest loans may be based on calculated financial need. Some loans are not need-based.

**Need** is the difference between the amount it will cost you to attend MSU for an academic year and the expected contribution from your family. It is a primary factor in determining eligibility for most available aid.

**Part time** refers to enrollment for fewer than 12 credit hours during the fall, spring, or summer semester.

**Residency** is an in-state/out-of-state classification for fee assessment purposes; policy guidelines are established and approved by the Kentucky Council on Postsecondary Education. *Students or prospective students with questions related to their residency for fee assessment purposes should contact Enrollment Services for additional information or for the necessary forms used in making a determination.*

**Scholarships** are generally awarded on the basis of academic achievement or special talent. They generally do not have to be repaid. Eligibility requirements and obligations vary from scholarship to scholarship.

**Tuition** is the fee charged for class enrollment.

**Undergraduate** is a student who has not completed the requirements for a bachelor’s degree.

**Work-Study Programs** provide part-time employment for eligible students to help with educational expenses. The work schedule is built around the student’s academic schedule. Students receive a paycheck for actual hours worked. The award does not credit toward the student’s account and/or payment plan.

Terms to Know

The following are important definitions that aid understanding of this section:

**An associate degree** requires no fewer than 60 semester hours and can be completed in two years or less, except for the AAS in Radiologic Technology and the AAS in Veterinary Technology which require a minimum of three years to complete.

**A bachelor’s or baccalaureate degree** requires no fewer than 120 semester hours and can be completed in four years or less.

**An area (area of concentration)** is a field of specialization requiring not less than 48 semester hours of credit, which can be completed in place of a major-minor combination.
A major is a principal field of specialized study in which a student plans to obtain a degree. A major requires no fewer than 30 semester hours of designated coursework and must be accompanied by a minor or second major.

A minor is a secondary field of study of no fewer than 21 semester hours of designated coursework.

A program of study is the major-minor combination or area of concentration which the student elects to pursue.

A teacher certification program is a state-approved course of study that leads to certification as a public school teacher.

Degree Abbreviations

AA — Associate of Arts
AAB — Associate of Applied Business
AAS — Associate of Applied Science
AAS — Associate of Applied Science in Nursing
AAS — Associate of Applied Science in Radiologic Science
AS — Associate of Science
BA — Bachelor of Arts
BBA — Bachelor of Business Administration
BFA — Bachelor of Fine Arts
BM — Bachelor of Music
BME — Bachelor of Music Education
BS — Bachelor of Science
BS — Bachelor of Science in Imaging Sciences
BSN — Bachelor of Science in Nursing
BSW — Bachelor of Social Work
BUS — Bachelor of University Studies
Academic Programs and Requirements for Graduation

Preprofessional (transfer) programs are also listed. You can find specific options or emphases within certain degree programs by referring to the catalog page number of the general subject area.

General Academic Information

Applying for Graduation
An Application for Undergraduate Degree Form can be obtained in the Office of the Registrar on this website: www.moreheadstate.edu/registrar/. An Application for Graduate Degree Form can be obtained in the Office of Graduate Programs at this website: www.moreheadstate.edu/graduate/. The undergraduate degree application form should be completed and submitted to the Office of the Registrar and the graduate degree application form should be completed and submitted to the Office of Graduate Programs by March 15th for Spring and Summer completion or October 15th for Fall completion. The Office of the Registrar is located at 201 Ginger Hall. The phone number is 606-783-2008. The Office of Graduate Programs is located at 701 Ginger Hall. The phone number is 606-783-2039. A one-time $20 degree application fee for graduation is required. If a student applies after the deadline, the degree application fee is $30.

Commencement is observed two times during the academic year. Ceremonies are held at the end of the fall and spring terms. For more detailed information regarding graduation and commencement:

Program Evaluations
Students should review their official Program Evaluation online or obtain a copy at MyMoreheadState account at http://my.moreheadstate.edu.

Students who subsequently change their area/major/minor program must complete a change of program form in the dean’s office of their chosen program.

Requirements for Graduation
To earn an undergraduate degree, students must meet general University requirements and specific program of study requirements. These requirements are explained in the academic programs section of this catalog. Below are the general University requirements for bachelor’s degrees, associate degrees, and second degrees.

Bachelor's Degree Requirements
The bachelor’s degree requires students to:
1. Complete a minimum of 120 semester hours of prescribed and elective college credit, 42 semester hours of which must be courses numbered 300 or above. See the academic programs section of this catalog for the specific requirements of the area of concentration or major and minor programs.
2. Earn a minimum cumulative GPA of 2.0 on all work completed at the University and on all work completed to satisfy area of concentration or major and minor requirements.
3. Complete an area of concentration of no fewer than 48 semester hours or a major of no fewer than 30 semester hours and a minor of no fewer than 21 semester hours. (These are minimum requirements. Students may also elect to satisfy two majors or a major and more than one minor.)
A major, minor, or area of concentration is not required for the Bachelor of University Studies degree.
4. Complete at least 32 semester hours at Morehead State University, with the last 16 hours preceding graduation earned from MSU. Fifty percent of the hours required for the major or area of concentration must be credit earned at MSU. Exceptions may be made with permission of the dean of the college in which the major or area of concentration is granted.
5. Bachelor of Science degree candidates must complete a minimum of 60 semester hours in science or science-related fields.
6. Complete 36 semester hours of general education courses.
Some degree programs require specific courses (exchange courses) within each general education category. Refer to the specific program elsewhere in this catalog for detailed program/course information.
7. Complete a three credit hour FYS - First Year Seminar during the first semester if the student begins as a freshman or transfers to MSU with less than 24 credit hours.
8. For students with 24 or more transfer credit hours, the FYS 101 requirement is waived, but the student must complete an additional course in SBS I or SBS II to meet general education requirements.
9. A bachelor’s degree and an associate degree may be applied for at the same degree date. However, no more than one bachelor’s and one associate degree will be awarded at the same date. A student may not apply for an AA degree once qualified for the bachelor’s degree. A student may not apply for a Bachelor of University Studies as a second degree.
10. Equated courses can only be taken once for credit. If an equated course is taken a second time using the different prefix, it will be considered a repeat and the last grade received will stand.

Note: Credit earned by examination cannot exceed 32 semester hours toward a baccalaureate degree or 16 semester hours toward an associate degree.

General Education Program
The General Education Program provides a foundation of knowledge and skills vital for any life students choose. The curriculum provides students with the attributes needed to participate
intelligently and responsibly in the discourses that shape the communities in which they live. General Education is more than the acquisition of information or skills for daily life; it transcends the merely factual to raise and engage evaluative and philosophical questions. General Education submits the fundamental principles and suppositions of a body of knowledge to inquiry and discussion. It challenges students to uncover and examine the assumption under which they operate. General Education aims to form in students a questioning spirit that will continue through their college career and their life as a whole and provide the grounds for development of the kind of people who can secure their own well-being while contributing to their communities, their professions, and the world in which they live. Approved Student Learner Outcomes (SLOs) form the foundation for student achievement, curriculum development, and program assessment. SLOs appear in the catalog appendix.

I. Required Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYS 101</td>
<td>First Year Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ENG 100</td>
<td>Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 200</td>
<td>Writing II or HON 200 - Ancient World (Honors students only)</td>
<td>3</td>
</tr>
<tr>
<td>ART 160</td>
<td>Understanding the Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>ART 263</td>
<td>World Arts</td>
<td>3</td>
</tr>
<tr>
<td>CMEM 210</td>
<td>Media Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ENG 120</td>
<td>Approaches to World Literature</td>
<td>3</td>
</tr>
<tr>
<td>FLM 170</td>
<td>Introduction to Film (Interdisciplinary)</td>
<td>3</td>
</tr>
<tr>
<td>HUM 250</td>
<td>American and Global Citizenship</td>
<td>3</td>
</tr>
<tr>
<td>IET 101</td>
<td>Social Dimensions of Technology</td>
<td>3</td>
</tr>
<tr>
<td>MKT 200</td>
<td>The ABC’s of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 101</td>
<td>Reel Business (Interdisciplinary)</td>
<td>3</td>
</tr>
<tr>
<td>PLS 200</td>
<td>Law and Individual Rights</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 101</td>
<td>Introduction to Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>SOC 203</td>
<td>American Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Distribution Requirements

For the 2011-12 academic year, incoming students needing general education courses beyond the core must choose from the following list of approved distribution courses. Only one course may be chosen from each prefix in a category. Students choose one course in HUM I, HUM II, SBS I, SBS II, NSC I, NSC II.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology for Your Life</td>
</tr>
<tr>
<td>CMEM 210</td>
<td>Media Literacy</td>
</tr>
<tr>
<td>CMEM 250</td>
<td>First Year Seminar</td>
</tr>
<tr>
<td>ENG 100</td>
<td>Writing I</td>
</tr>
<tr>
<td>ENG 200</td>
<td>Writing II or HON 200 - Ancient World (Honors students only)</td>
</tr>
<tr>
<td>ENG 120</td>
<td>Approaches to World Literature</td>
</tr>
<tr>
<td>FLM 170</td>
<td>Introduction to Film (Interdisciplinary)</td>
</tr>
<tr>
<td>HON 205</td>
<td>Language: Culture and Mind</td>
</tr>
<tr>
<td>GOVT 180</td>
<td>Introduction to Political Theory</td>
</tr>
<tr>
<td>HIS 101</td>
<td>The History of Your World</td>
</tr>
<tr>
<td>HIS 103</td>
<td>Holly-world: World History and Film (Interdisciplinary)</td>
</tr>
<tr>
<td>HON 210</td>
<td>IDC Core III: The Renaissance World (Interdisciplinary)</td>
</tr>
<tr>
<td>IET 101</td>
<td>Social Dimensions of Technology</td>
</tr>
<tr>
<td>IST 101</td>
<td>Introduction to International Studies (Interdisciplinary)</td>
</tr>
<tr>
<td>MATH 131</td>
<td>Mathematical Reasoning and Problem Solving</td>
</tr>
<tr>
<td>MATH 135</td>
<td>Mathematics for Technical Students</td>
</tr>
<tr>
<td>MATH 152</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 174</td>
<td>Pre-Calculus Mathematics or</td>
</tr>
<tr>
<td>MATH 175</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 275</td>
<td>Multicultural Arts (Interdisciplinary)</td>
</tr>
<tr>
<td>PHIL 100</td>
<td>Beginning Philosophy</td>
</tr>
<tr>
<td>PHIL 103</td>
<td>Beginning Ethics</td>
</tr>
<tr>
<td>PHIL 110</td>
<td>Introduction to the Theatre</td>
</tr>
<tr>
<td>PSY 154</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>RAPP 203</td>
<td>Society, Nature, and Development</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>WST 273</td>
<td>Introduction to Women’s Studies (Interdisciplinary)</td>
</tr>
<tr>
<td>SBS I</td>
<td>COMM 250 - Introduction to Intercultural Communication</td>
</tr>
<tr>
<td>SBS II</td>
<td>GOVT 141 - United States Government</td>
</tr>
<tr>
<td>NSC I</td>
<td>GOVT 102 - Generation Why? Understanding American Society</td>
</tr>
<tr>
<td>NSC II</td>
<td>HUM 250 - American and Global Citizenship</td>
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<td>HUM II</td>
<td>SOC 203 - American Social Problems</td>
</tr>
<tr>
<td>HUM II</td>
<td>AGR 185 - Current Food and Energy Issues</td>
</tr>
<tr>
<td>HUM II</td>
<td>APS 201 - Introduction to Appalachia (Interdisciplinary)</td>
</tr>
<tr>
<td>HUM II</td>
<td>ECON 101 - Introduction to Economics</td>
</tr>
<tr>
<td>HUM II</td>
<td>FIN 160 - Money: A Cultural Exchange</td>
</tr>
<tr>
<td>HUM II</td>
<td>GEO 100 - The Human World</td>
</tr>
<tr>
<td>HUM II</td>
<td>GOVT 102 - Introduction to Politics</td>
</tr>
<tr>
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<td>HON 210 - IDC Core III: The Renaissance World (Interdisciplinary)</td>
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<td>WST 273 - Introduction to Women’s Studies (Interdisciplinary)</td>
</tr>
</tbody>
</table>
III. Integrative Component

Students must take the course from the following list that is for their major of study.

- AGR 499C — Senior Seminar in Agriculture
- ART 499C — Visual Art Capstone
- ASTR 499C — Senior Thesis I
- ASTR 499D — Senior Thesis II
- BIOL 499C — Contemporary Environmental Issues
- BIOL 499D — Principles of Evolution
- COMM 499C — Senior Seminar in Communication
- CRIM 499C — Senior Criminology Capstone
- CRW 499C — Senior Thesis
- CS 499C — Senior Thesis I
- CS 499D — Senior Thesis II
- CTMR 499C — Seminar in Magnetic Resonance
- DMS 499C — Seminar in Sonography
- EDEC 499C — Senior Seminar in Effective Teaching
- ENG 499C — Senior Seminar in English
- ESS 499C — ESS Senior Thesis
- ESS 499D — C&I Action Research in ESS
- FRN 499C — Senior Colloquium in French
- GEO 499C — Senior Seminar in Geography
- GOVT 499C — Senior Seminar
- HIS 499C — Senior Seminar in History
- HIS 499D — Teaching Social Studies
- HLTH 499C — Senior Seminar in Health Promotion
- HPE 499C — Senior Seminar in HPE
- IET 499C — Senior Project
- IMS 499C — Senior Seminar in Imaging Sciences
- IST 499C — Senior Seminar
- MATH 499C — Senior Thesis I
- MATH 499D — Senior Thesis II
- MNGT 499C — Strategic Management
- MSU 499C — Senior Seminar
- MUS 499C — Senior Recital
- MUSW 499C — Senior Project
- NURB 499C — Advanced Nursing Practicum
- PHED 499D — Senior Capstone
- PHIL 499C — Senior Seminar in Philosophy
- PHYS 499C — Senior Thesis I
- PHYS 499D — Senior Thesis II
- PLS 499C — Senior Paralegal Practice Seminar
- PPOL 499C — Senior Seminar in Public Policy
- PSY 499C — Systems and Theories
- SOC 499C — Senior Seminar
- SPA 499C — Senior Seminar in Spanish
- SPMT 499C — Senior Capstone
- SSE 499C — Senior Design Project II
- SWK 499C — Senior Seminar
- THEA 499C — Senior Seminar Theatre
- VET 499C — Veterinary Technician Seminar

Notes:
The following courses may not be used to satisfy general education requirements: Pre-100 classes, Workshops 199-599, Co-op 139-539, Practicums, Internships, Special Problems, Field Experiences, Selected Topics, Independent Study, and Research Projects by Independent Study.

Bachelor of University Studies Degree Requirements

A major, minor, or area of concentration is not required for the Bachelor of University Studies degree. Students may take a wide variety of subjects or concentrate all studies beyond the general education requirements in a single discipline. For more information, see an advisor, regional campus director, or University College, 331 Allie Young Hall, 606-783-2084.

You will receive your Bachelor of University Studies degree after you:

1. Complete a minimum of 120 semester hours of prescribed and elective college credit, 42 semester hours of which must be courses numbered 300 or above.
2. Earn a minimum cumulative GPA of 2.0 on all work completed at the University.
3. Complete at least 32 semester hours at Morehead State University, with the last 16 hours preceding graduation earned from MSU. Correspondence courses do not satisfy this requirement.
4. Complete 36 semester hours of general education courses. See the general education course requirements for bachelor’s degree requirements.
5. Complete a three credit hour FYS 101: First Year Seminar course during the first academic year if the student begins as a freshman or transfers to MSU with less than 24 credit hours.
6. For students with 24 or more transfer credit hours, the FYS 101 requirement is waived but the student must complete a course in SBS I or SBS II to meet general education requirements.

Note: Credit earned by a combination of correspondence courses and credit by examination cannot exceed 32 semester hours toward a baccalaureate degree or 16 semester hours toward an associate degree.

Bachelor of University Studies - Professional Studies Track

Students may now enroll in the Bachelor of University Studies degree program. Those students that have completed or are dually enrolled in an Associate in Applied Science (AAS), Associate of Science (AS) or Associate of Arts degree program from Kentucky Community and Technical College System (KCTCS) may use their degree toward the completion of the online program at MSU.

KCTCS graduates who meet the admissions requirements and academic policies of MSU will be eligible for admission to the online Bachelor of University Studies in Professional Studies de-
degree program. This 2+2 agreement enables KCTCS graduates to complete a bachelor’s degree in the equivalent of two years of full-time study.

The BUS in Professional Studies degree program is specifically designed to be compatible with professional schedules and family commitments of adult students. Because it is a completely online program, students who transfer into the program do not need to relocate to the MSU campus in Morehead.

To be eligible for the program, students must:
- Complete or be dually enrolled in an AAS, AS or AA degree program.
- Meet MSU’s requirements for admission, which include a minimum grade point average of 2.0 for all classes taken.
- Apply and be accepted to MSU.

Due to the online nature of the program, students transferring into this program are exempt from participation in the First Year Seminar course and compulsory on-campus housing requirements. Students registered for the special online sections in the course rotation do not have to meet course prerequisites.

For additional information concerning course rotation, transfer student information or scholarship information (MSU offers scholarships for qualifying KCTCS students), visit www.moreheadstate.edu/content_template.aspx?id=3258

Collaborative BUS in Professional Studies (EKU + MSU)

MSU and Eastern Kentucky University offer a collaborative program for completion of a bachelor’s degree. Those students that have completed or are dually enrolled in an Associate in Applied Science (AAS), Associate of Science (AS) or Associate of Arts (AA) degree from Kentucky Community and Technical College System (KCTCS) may use their degree toward the completion of the program at either EKU or MSU. EKU will offer a Bachelor of Arts Professional track-General Studies and MSU will offer a Bachelor of University Studies - Professional Studies track. Students will pick MSU or EKU as their "home" school and attend classes at the MSU Jackson campus, EKU Corbin, EKU Manchester, or University Center of the Mountains in a rotating format. Students may take classes online, ITV, or in a traditional classroom setting. There are no prerequisite courses required for this program of study.

KCTCS graduates who meet the admissions requirements and academic policies of MSU will be eligible for admission to the collaborative Bachelor of University Studies in Professional Studies degree program. This 2+2 agreement enables KCTCS graduates to complete a bachelor’s degree in the equivalent of two years of full-time study. Because of the collaborative nature of this program students who transfer into this program will not be required to complete the required prerequisites for the select course rotation in the program and because it is completely online at MSU, KCTCS students who transfer into the program do not need to relocate to the MSU campus in Morehead.

To view the Course Term Plan rotation for MSU and EKU, visit http://www.moreheadstate.edu/WorkArea/DownloadAsset.aspx?id=3667.

To Apply
1. Complete Application for EKU + MSU Collaborative Program (which is separate from our Admissions/Scholarship Application).

2. Submit your official transcripts that note completion of your Associate degree. If you are in your last term of your degree completion, have your Registrar’s Office submit a letter that your degree is pending along with your transcripts. Once your degree is complete, submit official transcripts.

3. Requirements for program - At least a 2.0 GPA or above & completion of your Associate degree.

Associate Degree Requirements

You will receive your associate degree after you:

1. Complete a minimum of 60 semester hours of prescribed and elective college credit. See the academic programs section of this catalog for the specific requirements of your associate degree program. A prescribed program is not required for the Associate of University Studies degree.

2. Earn a minimum cumulative GPA of 2.0 on all work at the University.

3. Complete at least 16 semester hours at Morehead State University, including one semester preceding graduation. Correspondence courses do not satisfy this requirement.

4. Complete the three credit hour FYS 101: First Year Seminar course during the student’s first academic year if the student begins as a freshman or transfers to MSU with less than 24 credit hours.

5. For students with 24 or more transfer credit hours, the FYS 101 requirement is waived but the student must complete an additional course in SBS I or SBS II to meet general education requirements.

6. Complete 15 semester hours of general education requirements as follows:

<table>
<thead>
<tr>
<th>General Education Courses - Associate Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYS 101 — First Year Seminar</td>
</tr>
<tr>
<td>Writing I (100 level)</td>
</tr>
<tr>
<td>ENG 100 — Writing I or HON 200</td>
</tr>
<tr>
<td>Writing II (200 level)</td>
</tr>
<tr>
<td>ENG 200 — Writing II or HON 200 — Ancient World</td>
</tr>
<tr>
<td>Oral Communications (100 level)</td>
</tr>
<tr>
<td>COMM 108 — Fundamentals of Speech Communication</td>
</tr>
<tr>
<td>Math Reasoning (100 level)</td>
</tr>
<tr>
<td>Choose one course from the following:</td>
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<tr>
<td>MATH 131 — Mathematical Reasoning and Problem Solving</td>
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<td>MATH 135 — Mathematics for Technical Students</td>
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<td>MATH 152 — College Algebra</td>
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<td>MATH 174 — Pre-Calculus or</td>
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<td>MATH 175 — Calculus I</td>
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<td><strong>Total</strong></td>
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To view the application, visit http://www.moreheadstate.edu/WorkArea/DownloadAsset.aspx?id=3668.
Associate of Arts in University Studies
Degree Requirements
Except for the 15 hours of general education requirements, no prescribed program of study is required for this degree. You may take a wide variety of subjects or concentrate all studies beyond the general education requirements in a single discipline. All other associate degree requirements must be met. (See associate degree requirements above.) For more information, see your advisor or the University College, 331 Allie Young Hall, 606-783-2084.

Second Degree Requirements
If you have earned a degree from Morehead State University or any other accredited college or university, you may earn a second bachelor’s degree or associate degree by completing program requirements approved by your major department. Visit the following link to obtain detailed information regarding the specific requirements approved by your major department. Visit the following link to obtain detailed information regarding the specific requirements approved by your major department:
http://www.moreheadstate.edu/files/units/daa/uar/uar111-01.pdf

Administrative Policies and Procedures
Assessment
Morehead State University uses various tests and survey instruments to assess student progress and to evaluate academic programs and services. All students who are selected to participate are expected to engage in both University-wide and departmental assessment activities. For further information about requirements, contact the Testing Center, 501 Ginger Hall, 606-783-2526.

Academic Regulations and Procedures
Late Registration
Students are encouraged to advance register for classes according to the dates published in the Academic Calendar. Late registrants are assessed a $75 late registration fee and could encounter scheduling difficulties. After the scheduled enrollment period, students registering for the first time must report to Enrollment Services, 100 Admissions Center. Students returning after a period of one semester or more must reapply through Enrollment Services and process registration in the department of the major.

Change in Schedule
Schedule changes include adding and dropping a course, changing from one course section to another, changing the number of credits involved in any course, or changing from audit to credit or from credit to audit.

After the published date, full-term courses may be dropped only because of documented circumstances. Approval of the dean of the college in which the student is majoring is required.

Course Load
Visit this link for the Course Load policy:

Undergraduates Enrolling for Graduate Credit
A student in the final semester of undergraduate study at MSU who has a minimum GPA of at least 2.5 may apply to enroll concurrently in courses for graduate credit not to exceed a total of 12 semester hours (undergraduate and graduate combined).

If the work for a baccalaureate degree is being completed during a summer term, the combined course load is not to exceed six semester hours. Application for permission to take graduate courses is made to the Associate Vice President of Academic Affairs prior to registration. Copies of the Seniors Enrolling in Graduate Credit form can be obtained online under "Forms" at the following link:
http://www.moreheadstate.edu/graduate or from the Graduate Office, 701 Ginger Hall.

If for any reason requirements for the baccalaureate degree are not completed during the term in question, no further permission will be given to register for graduate courses until the requirements for the baccalaureate degree have been met and regular admission to graduate study has been granted.

Student Classification
Classification is determined by the number of credit hours, including transfer work, successfully completed. The classifications are 0-29 hours, freshman; 30-59 hours, sophomore; 60-89 hours, junior; 90 hours and above, senior.

Course Numbering

Courses numbered below 100 are developmental courses. These courses carry credit which is counted in the student’s load. The grade earned is computed in the student’s GPA. However, credits earned do not count toward program or general education requirements, and they do not count toward the minimum hours required for graduation. Generally, courses may be taken only one level above a student’s present classification. Courses may be taken at any level below a student’s present classification. More detailed information can be accessed from the Course Numbering policy from the following link:

Repeating Courses
The policy has been implemented to establish the guidelines and procedure for repeating courses. The policy can be accessed at the following link:

Auditing Courses
An auditor is a student who enrolls and participates in a course without expecting to receive academic credit. The same registration procedure is followed and the same fees are charged as courses taken for credit. An audited course is not applicable to any degree. Audit enrollment will not be considered a part of the minimum number of hours required to determine full-time status or normal load. Audit enrollment will be counted in determining overload.
Regular class attendance is expected of an auditor. Other course requirements, which may be obtained in writing from the instructor, will vary depending on the nature of the course. Students interested in auditing a course should contact the instructor and discuss course requirements prior to enrolling. Failure to meet audit requirements for the course may result in the auditor being withdrawn from the course at the request of the instructor with a "WY" (Audit Withdrawal) entry made on the student’s transcript. A successful audit will be recorded on the transcript with the designation "Y." Any change from audit to credit must be done by the last day to add a class. Changes from credit to audit must also be done by the last day to add a class. Refunds for withdrawals from audited courses will be prorated on the same basis as refunds for withdrawals from courses taken for credit.

**Attendance/Absence**

Prompt and regular class attendance, being essential to the learning experience, is the responsibility of all students. Students missing class because of legitimate reasons must consult with the instructor concerning the absence, preferably beforehand. Legitimate absences do not excuse the student from class responsibilities. Some examples of absences that may be excused by the instructor are illnesses, accident, personal emergency, death in the immediate family, special academic programs, or an authorized University function for which the student’s presence is required. Students who feel that they have been unjustly penalized by an instructor's attendance policy or by the instructor refusing to accept an excuse may follow the academic grievance procedures outlined in the student handbook.

Student athletes are required to confer with their coaches and advisors prior to the start of a semester in order to choose required classes that minimize class and athletic event conflicts. When conflicts are unavoidable, they should be kept to a reasonable number per semester. Faculty should be advised of specific conflicts by the student athlete within the first week of the semester. If the athletic event schedule changes after the first week, it is the student’s responsibility to notify faculty promptly. When the nature of the work missed is such that it can feasibly be made up, students must make arrangements with faculty to do so.


**Final Examinations**

Any student with more than two final examinations scheduled on any one day is entitled to have the examination for the class with the lowest catalog number rescheduled at another time during the final examination period. If a suitable arrangement cannot be made between the student and the instructor, then the next highest number may be rescheduled. In case the lowest number is shared by more than one course, the one whose department prefix is first alphabetically will be rescheduled. The option to reschedule must be exercised in writing to the appropriate instructor two weeks prior to the last class meeting.

**Withdrawals**

To withdraw from the University, a student must complete a withdrawal form with the Office of the Registrar. It is important for a student’s academic record to reflect an official withdrawal; entitled refunds are not made unless the withdrawal is properly recorded. Withdrawals can be submitted electronically to registrar@moreheadstate.edu or mailed to the Registrar’s Office at 201 GH, Morehead State University, Morehead, KY 40351 or faxed to 606-783-9103.

**Medical Withdrawal Policy**

The purpose of the Medical Withdrawal Policy is to provide guidelines and procedures for graduate and undergraduate students who have exceptional health circumstances that require withdrawal from the University after the normal withdrawal period. The Medical Withdrawal forms can be located on the website at the following link: [http://www.moreheadstate.edu/files/units/daa/uar/UAR%20130.01%20-%20Medical%20Withdrawal%20Policy%20%2006-01-09.pdf?n=5111](http://www.moreheadstate.edu/files/units/daa/uar/UAR%20130.01%20-%20Medical%20Withdrawal%20Policy%20%2006-01-09.pdf?n=5111). A hard copy of the policy may be obtained by calling Academic Programs at 606-783-2003 if you are unable to access the forms electronically.

**Grades**

**Marking System and Scholastic Points**

The evaluation of the academic work of undergraduate students is indicated by letters as follows:

- **A — Excellent** — Valued at four quality points per semester hour.
- **B — Good** — Valued at three quality points per semester hour.
- **C — Average** — Valued at two quality points per semester hour.
- **D — Below average** — Valued at one quality point per semester hour.
- **E — Failure** — No semester hours earned and no quality points. This grade is given to a student who completed the course and earned a failing grade.
- **I — Incomplete** — Given only when a student has completed all but a small amount of course work due to illness of other significant extenuating circumstances (refer to UAR 131.01). Incompletes must be made up by midterm the following semester (summer term excluded) and instructors must file an Incomplete Grade Form in the College Dean's office. When entering a grade of "I" for the term, you must enter an expiration date. The expiration date for the Spring Term is October 15th and March 15th for Fall Term.
- **IP — In progress** — This grade is to be assigned to any 670 (Directed Research), 699 (Thesis) or 676 (Directed Study) Course ONLY.
- **K — Credit, pass-fail course** — Semester hours earned; no quality points; not computed in GPA. This grade is given when a student passes a pass-fail course.
- **N — Failure, pass-fail course** — No quality points; computed in GPA and used in undergraduate grad-
### Pass-Fail

The purpose of the pass-fail option is to let you explore elective courses outside your area of specialization without engaging in grade competition with students specializing in those courses. Apply at the office of the dean of your first major by the last day to add a course.

**Requirements include the following:**

1. A minimum of 2.5 cumulative GPA for 30 hours earned at MSU. You are eligible as a transfer student with a minimum of 30 hours, if at least 12 hours were earned at MSU, and you have a 2.5 GPA on the work completed at MSU.
2. A maximum of 15 hours may be applied toward the total number of hours required for the bachelor's degree; six hours may be applied toward associate degree requirements.
3. The pass-fail option is applicable only to free elective courses. These include courses not required for your area, major, minor, or general education requirements.
4. Each semester you may use the pass-fail option for one course (for any number of hours of credit), or a combination of courses totaling up to three hours.
5. Hours earned in pass-fail work are added to your total hours passed but do not affect your GPA. Any grade of "D" or above is considered passing and is designated by "K." A failing grade is designated by "N."
6. You may change course registration status from pass-fail to the conventional letter grading system, and vice versa, during the normal period to add a course.
7. You cannot transfer hours earned under the pass-fail option into any degree program.
8. Your status under the pass-fail option is not identified to instructors. Instructors assign a conventional letter grade and the registrar converts the assigned letter grade to a "K" or "N," as applicable.

9. Pass-fail credit may not be applied to a second degree.

### Honors

**Academic Dean's List.** To be eligible, you must have passed at least 12 undergraduate hours and have earned at least a 3.5 GPA for the current semester.

**Graduating with Honors.** Formal recognition is given to two- and four-year graduates who have achieved academic excellence. Baccalaureate degree recipients who complete at least 43 hours at MSU with an MSU GPA of 3.50 to 3.69 graduate cum laude; 3.70 to 3.89 graduate magna cum laude; and 3.9 to 4.00 graduate summa cum laude. Associate degree recipients who complete a minimum of 32 semester hours at MSU and earn an MSU cumulative GPA of 3.60 or better graduate with distinction. Only work completed at MSU is used in computing GPA.

### Grade Reports

Grades will be available on the student's Web Advisor account no later than Wednesday following the end of the term. All undergraduate students receive mid-term grades.

### Transcripts

Requests for official transcripts are made through the Office of the Registrar. Requests may be made in writing, in person, or on the web. The instructions for each method are as follows:

#### Request a transcript in writing

- Print out the following form located under "Forms" at http://www.moreheadstate.edu/registrar/, or otherwise write down the information it requires. Your signature is required on the request document.
- Send a check or money order to Morehead State University or complete the credit card information on the transcript request form. The transcript fee is $7 for each transcript requested.
- Mail the form and payment to: Office of the Registrar, 201 Ginger Hall, Morehead, KY 40351.

#### Request a transcript in person

- Transcripts may be requested in the Office of the Registrar, 201 Ginger Hall.
- Transcript requests with a 24-hour turnaround time are assessed a $7 fee for each transcript.
- If you wish to pick up your transcript at time of request, the transcript fee is $15 for each transcript.

#### Request a transcript online

- Log on to your MyMoreheadState account.
- Under "My Info" select Academic Profile. Then select Transcript Request.
- Fill out the online form. Payment is done by credit card upon submission of the request.
- Transcripts will be mailed to each address you specify by the next business day.
- If you wish to pick up your transcript, enter "Pick up" in the address field.
Note: If you have a hold on your record, you will not be able to request a transcript until you clear all your holds.

Student Records
In accordance with the Family Educational Rights and Privacy Act and Morehead State University policy, nondirectory information from your official cumulative file may not be released without your written consent except to persons engaged in the proper performance of University duties.

You also have the right to inspect, review, and challenge all official educational records, files, and data directly related to you. Request for access to such records or questions concerning this law and the University policy may be directed to the Office of the Registrar, 201 Ginger Hall.

Visit the following link to access several forms pertinent to the student record:
http://www.moreheadstate.edu/registrar/index.aspx?id=57579

Scholastic Standing
To continue enrollment at MSU, students must maintain certain GPA standings based on the number of credit hours attempted (UAR 123.04). Total hours include all credits attempted at MSU and transfer work. Grade point average is calculated using only MSU coursework. Students are eligible to register if they meet the minimum 2.0 cumulative GPA.

Academic Probation. Students failing to meet the scholastic standards listed above are placed on Academic Probation and must participate in the Academic Recovery Program following spring semester. At the end of each academic term, the Registrar provides a grade report that reflects grades for the term and the MSU cumulative grade point average (transfer work is not calculated in the MSU cumulative GPA). A student on Academic Probation may enroll in no more than 13 semester hours of coursework each semester and for no more than three semester hours of coursework during each summer session. Students on academic probation should retake as many classes as possible in which they earned a grade of "E," "D," or "U."

Students on academic probation will be required to complete the requirements outlined in the Academic Recovery Program. See also the Financial Aid Satisfactory Progress Standard.

Suspension. Any student, who after two consecutive semesters (excluding summer terms) on academic probation, has not earned the grade point average specified above on academic probation, will be suspended from the University. The suspension period following a fall semester is the spring semester; following a spring semester, the suspension period is for the summer terms and fall semester. During a suspension period, a student will be ineligible for any credits at Morehead State University.

Students suspended under this policy have the following two options:
1. They may appeal by petitioning a hearing before the Committee on Academic Standards and Appeals if the student believes the suspension was the result of circumstances beyond his or her control. If an appeal of the suspension is granted, the student must meet all additional requirements set forth by the Committee on Academic Standards and Appeals. The committee may, in some cases, waive the requirement that the student has attempted 48 semester hours before declaring bankruptcy.

Requests for appeals are made in the Office of First Year Programs and Academic Services.
2. They may reapply after the lapse of one semester (excluding summer school). Students wanting to return to MSU will need to complete a new application and meet with the admissions appeal committee for consideration to be readmitted. Students returning after suspension will be required to complete and participate in the Academic Recovery Program upon readmittance to the University. See also the Financial Aid Satisfactory Progress Standard which is a separate process.

Academic Bankruptcy
Academic Bankruptcy gives undergraduate students with an unacceptable grade point average the opportunity to drop one semester's work from consideration for University academic degree requirements.

Impact: Undergraduate students who are granted bankruptcy status forfeit credit for all courses in the bankruptcy semester. The grades and credit hours earned during that semester are disregarded for University requirements. The notification “academic bankruptcy” appears on the transcript beneath the semester's work. Bankruptcy cannot be revoked once it has been granted. Bankruptcy cannot be used more than once.

Eligibility: Only hours attempted at Morehead State University are considered for bankruptcy; transfer hours are excluded.

The requirements for academic bankruptcy are:
1. The student must apply for bankruptcy before completing a degree at the University.
2. The student must have attempted at least 48 semester hours at the University.
3. For the term in question, the student must have a grade point average of at least 1.00 under the cumulative average for all other hours completed at the University.

Procedure: To apply for academic bankruptcy, the student obtains an Academic Bankruptcy form in the Office of the Registrar or at the following link: www.moreheadstate.edu/registrar. This form is filled out, signed by the academic advisor and/or the department chair and returned to the Registrar for verification of eligibility. The Registrar notifies the student and the academic advisor and/or department chair in writing regarding eligibility. An appeal of the eligibility ruling is made through the Academic Standards and Appeals Committee of the University.

Academic Grievance Procedure
When a student has an academic dispute with a faculty member over a grade, there are procedures that exist to resolve the complaint in the most satisfactory way for both the student and faculty member. If the complaint involves a final grade, the student must take the complaint to the faculty member within the first two weeks of the beginning of the following semester. This policy requires several steps to complete the process. The entire policy that outlines the process, along with forms that must be completed, may be found online at http://www.moreheadstate.edu/files/units/daa/uar/UAR%20112%20-%20Academic%20Grievance.pdf?n=9099.
A hard copy of the policy may be obtained by calling Academic Programs at 606-783-2003 if you are unable to access the forms electronically.

**Academic Honesty Policy**

All students at Morehead State University are required to abide by accepted standards of academic honesty. Academic honesty includes doing one’s own work, giving credit for the work of others, and using resources appropriately.

**Guidelines for Dealing with Acts of Academic Dishonesty**

If a faculty member suspects that a student is guilty of a breach of the standards and chooses to pursue disciplinary action through University channels, the faculty member should:

1. Hold a conference with the student to attempt to address the problem.
2. If the student is determined to be responsible, the faculty member should issue the sanction. The sanction may include failure of a particular assignment or exam, failure of a particular class, or any other appropriate disciplinary action.
3. If a sanction is imposed on the student, then the faculty member is expected to report in writing to the department chair the details of the incident, the results of the student/faculty member conference, and the sanction issued. A copy of this report should be forwarded to the appropriate college dean and to the Assistant VP/Dean of Students. (The Assistant VP/Dean of Students is responsible for maintaining and safeguarding all University discipline records and for ensuring their confidentiality. A central record of all acts of academic dishonesty and plagiarism ensures that a student will be held accountable for subsequent violations.)
4. If the Assistant VP/Dean of Students has on file for particular student(s) previous violations of the code, this information is to be sent to the faculty member and department chair.
5. If the faculty member and department chair determine that the severity of the academic dishonesty or the fact or nature of previous violations by the same student(s) warrants further disciplinary action, a request for further action should be made in writing to the Assistant VP/Dean of Students. The Assistant VP/Dean of Students will review the submitted material and hold an investigative hearing with the student(s) involved. At this time, the Assistant VP/Dean of Students will determine if further disciplinary action is warranted.
6. The Assistant VP/Dean of Students will report, in writing, any additional disciplinary actions taken to the college dean, the department chair, the Provost, the faculty member making the charges, and student(s) being charged.

Nothing in this policy shall prevent or prohibit the student(s) charged from making an appeal of the disciplinary action administered.

**Sexual Harassment Policy**

Morehead State University takes seriously the rights of the campus community to be free from sexual harassment in all forms. The Board of Regents has adopted a policy prohibiting sexual harassment across the University that applies to students and employees alike. PG-6 provides detailed procedures for the reporting, investigation, and resolution of all such complaints. Students and employees are urged to become familiar with the policy to report harassment. Click on the following link for the Sexual Harassment Policy:

http://www.moreheadstate.edu/hr/policies/index.aspx?id=1607

or contact Human Resources at 606-783-2097 to request an electronic or hard copy of the policy.

**Academic Support**

**University Outreach**

Morehead State University maintains five regional campus centers in Ashland, Jackson, Mount Sterling, Prestonsburg, and West Liberty for the purpose of providing higher education access to place-bound and time-bound students who are geographically remote from the University’s campus in Morehead. The University offers 75 percent or more of its undergraduate programs at the following sites.

**MSU at Ashland**

1400 College Drive, Suite L 272
Ashland, KY 41101
606-783-2901; 606-327-1777 or 800-648-5370
www.moreheadstate.edu/ashland

BA (Elementary & Middle Grades Education)
Bachelor of Social Work
Bachelor of University Studies

**MSU at Jackson**

Breathitt County Life Skills Center
1127 Main Street
Jackson, KY 41339
606-783-2940; 606-666-2800 or 800-729-5225
www.moreheadstate.edu/jackson

BA (Elementary & Middle Grades Education)
Bachelor of University Studies

**MSU at Mt. Sterling**

Clay Community Center
3400 Indian Mound Drive
Mount Sterling, KY 40353
606-783-2078; 859-499-0780 or 866-870-0809
www.moreheadstate.edu/mtsterling

AA (University Studies)
Bachelor of University Studies
Bachelor of Social Work
AAS (Nursing)

**MSU at Prestonsburg**

6 Bert Combs Drive
Prestonsburg, KY 41653
606-783-5421; 606-886-2405 or 800-648-5372
www.moreheadstate.edu/prestonsburg

BA (Elementary & Middle Grades Education)
Bachelor of Social Work
Bachelor of University Studies

**MSU at West Liberty**

155 University Drive
West Liberty, KY 41472
606-783-5381; 606-743-1500 or 800-648-5371
www.moreheadstate.edu/westliberty
AA (University Studies)
Bachelor of University Studies

Maysville
Rm 320A Administration Bldg.
Maysville Community and Technical College
Maysville, KY 41056
606-759-7141 ext 66270
www.moreheadstate.edu/maysville

Distance Education

Morehead State University offers numerous distance education classes, through advanced technology, to students in the region. Undergraduate classes are available at compressed video sites within the University’s service region and via the Internet. Students earn credit toward a degree by interacting with their peers and professors through compressed video and Internet classes. Internet, television, or online courses allow place-bound and time-bound students to earn college credit. For more information on the courses available through distance learning, contact the Office of Distance Education, 312 Allie Young Hall, 606-783-2605 or 800-585-6781, option # 3. For complete programs and courses, contact the academic department of your major.

Instructional Sites

Undergraduate classes are also offered at various locations throughout the University's service region. Courses are offered in Maysville, Hindman, Lexington, Somerset, and other sites during the academic year. For a schedule of classes or more information, contact the Distance Education & Continuing Education Director, 312 Allie Young Hall, 606-783-2605 or 800-585-6781.

Office of First Year Programs and Academic Services

The Office of First Year Programs and Academic Services offers a variety of academic support programs to help students be successful at Morehead State University. For additional information, go to www.moreheadstate.edu/firstyear or call 606-783-5208.

Academic Services

Individualized academic counseling and guidance services are available upon request, as well as workshops and seminars centered on improving study habits and increasing motivation for academic success. For information or assistance, call 606-783-2084. Other services available include the following:

Academic Advising. Academic advising for undeclared and Bachelor of University Studies students is offered by full-time, professional advisors. Advisors assist students with information about specific programs, University procedures, and career counseling. The Exploratory Program for undeclared students offers a series of interest inventories and one-on-one advising sessions to help students decide on a major.

Minority Retention and Academic Services. Minority academic services include advising, workshops, tutoring, and study groups for minority students. For more information, call 606-783-9453.

Tutoring and Learning Center. The TLC offers free academic assistance outside the classroom to all MSU students. Tutoring is available days, evenings and weekends. TLC peer tutors can help with individual class assignments, as well as test preparation and study skills. Tutor-led study groups are also available. To make a tutoring appointment, go to www.moreheadstate.edu/tutoring and follow the TutorTrac link. The TLC also provides study areas for monitored study hours. Computers are available for student use. For more information, phone 606-783-5200, go to www.moreheadstate.edu/tutoring or come to the Tutoring and Learning Center at Allie Young 220.

Academic Recovery Program. The Academic Recovery Program is designed for students who perform below academic standards. Students are provided resources and strategies that can aid in achieving academic success.

Disability Services. Assistance for students with physical, psychological, and learning disabilities is available through the Disability Services office in accordance with the ADA and Section 504 of the Rehabilitation Act. Requested accommodations must relate to a functional limitation that you experience as a student at MSU, and if approved, will be provided at no charge. To qualify, you will need to submit documentation of a disability from an appropriate professional and confidentially discuss your needs with a Disability Services staff member. While you may pursue these services at any time, earlier contact may be in your interests as some accommodations take longer to arrange and they will not be applied retroactively. For more information or to schedule an intake session, call 606-783-5188 or visit www.moreheadstate.edu/disability.

Success Academy. The Success Academy is a summer program of college instruction and tutoring services for new students who need additional academic preparation.

Student Orientation, Advising, and Registration (SOAR). SOAR is a one-day overview of the educational opportunities and services at MSU. New students will learn more about MSU, register for classes, and meet other students, faculty, and staff. New freshmen or transfer students enrolling for the fall semester are encouraged to participate in the Student Orientation, Advising, and Registration (SOAR) program. The activities provide an overview of the educational opportunities and facilities of the University. Students will also meet with academic advisors and register for classes. SOAR is offered in April, June and July.

New Student Days. New Student Days provides fun and educational activities for new students the weekend before classes begin. New Student Days orientation programs are held during the regular fall and spring registration periods. All new freshmen and transfer students, including those that attended the summer orientation, are required to attend the fall program. Students are notified of the specific dates and times of these activities upon their acceptance to MSU by the Office of First Year Programs and Academic Services.

Provisional Studies Program

Provisionally admitted students are assigned to academic advisors in the Office of First Year Programs and Academic Services. These advisors will monitor and direct their academic activities. Provisionally admitted students work with their advisor(s) to design a plan of remediation in developmental courses designed to increase competency in identified areas of need. Credits earned from developmental courses do not count toward program or general education requirements, and they do not count toward
the minimum hours required for graduation. However, developmental courses do carry credit which is counted in the semester workload, and the grades earned for developmental courses are computed in the student’s GPA.

To successfully exit the Provisional Studies Program and enroll in a degree program at the University, a student must:

1. Complete all required placement testing.
2. Obtain a grade of "C" or higher in all required developmental courses.
3. Successfully complete two semesters with a cumulative GPA of 2.0.
4. Successfully complete a minimum of 12 semester hours of general education requirements.
5. Attend a minimum of five hours of documented study tables per week at an approved tutoring location.
6. Each semester meet with an assigned academic advisor in the Office of First Year Programs and Academic Services once during the first four weeks of classes and once within two weeks after mid-term week.

Provisional students may not declare a major until all requirements have been met. Failure to satisfy the requirements of the Provisional Studies Program by the end of the freshman year will result in academic dismissal. For more information, contact the Provisional Studies Coordinator, 222 Allie Young Hall, 606-783-2310.

**Instructional Support**

**Academic Advising Program**

The University provides a program of academic advisement to assist students with information about specific programs and University procedures, with career guidance and counseling, and with general academic support throughout their college experiences.

**Advisor Assignment**

Although students may not have a primary advisor assigned when they register, department chairs and academic advisors are available to assist students. A permanent advisor is assigned during the first two weeks of the first semester of enrollment. Students who have declared a program of study should see the chair of that department for the name and office location of their advisor. Students who have not declared a major, are seeking the Bachelor of University Studies degree, or Provisional Studies students, may contact the Office of First Year Programs and Academic Services in 321 Allie Young Hall or by calling 606-783-5208. It is the student’s responsibility to make the initial contact with the academic advisor.

**Required Advisor Contacts**

It is essential that students maintain a close relationship with the academic advisors through frequent visits. Students must touch base with the advisor periodically for the following purposes:

1. To obtain the advisor’s approval of the trial schedule prior to registration;
2. Student and advisor plans current and future class schedules;
3. To initiate class changes during the drop/add period;
4. To complete a change of program form to change the major, minor, or area of concentration; and
5. To complete the online Program Evaluation. Transfer students should schedule a conference at the beginning of their first semester at MSU.

**Student Support Services**

This program serves students who are first generation college students, meet low income guidelines, or have a physical or learning disability. An individualized educational plan which may include tutoring, advising, counseling, and cultural enrichment is designed to meet the unique needs of each student. For information about the program stop by 233 Allie Young Hall, or by phone at 606-783-2614, or on the web at http://www.moreheadstate.edu/sss/.

**Nontraditional and Commuter Student Counseling**

The coordinator for nontraditional and commuter students is available to see all undergraduate, nontraditional students who are 23 years of age or older and all commuter students. The nontraditional coordinator serves as an advocate for the increasing number of adult students at MSU. The coordinator helps link these students to academic and campus resources for concerns such as study habits, time management, family, career, and financial needs.

The nontraditional coordinator also directs the STEPS project, which provides workstudy wages to students participating in K-TAP. This office is located in Enrollment Services and can be reached by phone at 606-783-2000.

**Computer Resources**

Morehead State University, through the offices of Information Technology, provides a variety of computing resources in support of instructional, administrative, alumni, and research activities. Several dozen servers are maintained to support Web, e-mail, and other academic and administrative functions. More than 2,500 microcomputers located in classrooms, labs, and offices are replaced on a regular cycle to maintain state-of-the-art desktop technology across campus.

The University maintains more than 60 networked student labs/classroom facilities available to students throughout the campus, including a 30-station open access computer lab. All instructional facilities, residence hall rooms, and administrative facilities are attached to a campus telecommunications backbone that provides high-speed data access to local, state, national, and international networks through the Internet. Additionally, all classroom buildings and selected commons areas across campus provide secure wireless access to the high-speed backbone.

Access to student services, such as course registration, financial aid processing and fee payments, is available to students and prospective students through the campus website at my.moreheadstate.edu.

Other technology resources available to students include free voice mail (upon request) and e-mail service, as well as free local phone service and digital cable television services to students living in a residence hall. The University also offers undergraduates an affordable lease program for PC Tablet microcomputers.

Requirements for Graduation 27
Student Trip Insurance

Student trip insurance is available for students accompanying faculty and staff on University-sponsored field trips. The cost is minimal and all applicable students are strongly encouraged to obtain this coverage prior to the date of departure.

Trip insurance is available from the Office of Environmental Health and Safety. Application forms may be obtained by mail or by fax by calling 606-783-2179. The completed application forms must be returned to the Office of Environmental Health and Safety a minimum of 72 hours prior to the date coverage is to become effective. For students traveling outside the country, international travel identification cards may also be obtained through the Office of Environmental Health and Safety.

Testing Center

The Testing Center provides testing services to the University and the region. Testing is conducted on a daily basis by appointment or prior registration. Established testing programs include ACT, SAT, COMPASS, CLEP, GED, LSAT, Kryterion Certification testing, Miller Analogies, the PRAXIS Series, Kentucky Principals Exam, various departmental proficiency examinations, and distance learning proctoring. Literature describing the different testing programs and their functions is available at the Testing Center, 501A Ginger Hall, 606-783-2526 or online at www.moreheadstate.edu/testing.

Credit-by-Examination

Morehead State University awards academic credit toward a bachelor’s degree or an associate degree for those scoring satisfactorily on any of the following examinations:

1. The Advanced Placement Program (AP)
2. The College Level Examination Program (CLEP)
3. Departmental Examinations
4. International Baccalaureate (IB)

Credit-by-examination is not recorded on a permanent transcript in the Office of the Registrar until the student qualifying for credit enrolls at Morehead State University. Credit-by-examination is recorded as "K" credit; hence it has no effect on GPA.

College-Level Examination Program (CLEP)

Students of all ages interested in obtaining a college education have reduced expenditures in time and money by successfully completing college-level examinations. Many American colleges encourage students to take CLEP tests for credit in subjects they have mastered.

Students may register for CLEP examinations at MSU by contacting the Testing Center, 501A Ginger Hall, 606-783-2526. For score requirements to earn credit hours through CLEP examinations, please contact the Testing Center at the address and phone number above or visit the website at http://www.moreheadstate.edu/testing/index.aspx?id=49445.

Advanced Placement Program

Students may earn college credit through the Advanced Placement Program of the College Board upon completion of courses and special examinations taken in high school. The AP score should be sent to the Testing Center, Morehead State University, 501A Ginger Hall, (606) 783-2526, at the time application for admission is submitted or as soon as possible thereafter. Upon enrollment at MSU, the student should notify the Testing Center so that proper credit will be posted to the transcript. For specific examination and equivalent MSU courses information, visit the Testing Center website at http://www.moreheadstate.edu/testing/index.aspx?id=49442.

Departmental Examinations

Students enrolled at Morehead State University may also receive credit on the basis of departmental examinations. A department may choose to develop an appropriate exam or adopt a standardized examination from outside the University.

Those wishing to take a departmental examination must contact the appropriate academic department chair for approval. Prior to taking the exam, the student must pay an exam fee in the Testing Center, 501A Ginger Hall.

International Baccalaureate (IB) Program

Students enrolled may receive course credit earned through the International Baccalaureate (IB) Program offered by their high schools. Students must submit an official IB transcript for evaluation of scores. IB credit is recorded as “K” credit and is not included in the MSU GPA.

Computer Competency

Computer competency may be demonstrated through a departmental examination. With satisfactory scores, three hours credit may be awarded for CIS 101. Contact the Testing Center, 501A Ginger Hall, (606) 783-2526 for information about the exam.

University Counseling Center

The Office of Counseling and Health Services (CHS), located on the first floor of Allie Young Hall, provides MSU students with both psychological and physical health services.

The University Counseling Center’s (UCC) services include individual psychotherapy and counseling, groups, workshops, and consultations. Caudill Health Clinic (CHC) services include patient assessments, examinations, treatment, and emergency first aid. Students are encouraged to use the clinic as they would their primary care provider. Insurance is accepted in both the health and counseling area. Bring a copy of your current insurance with you when you visit the clinic.

Health clinic hours are from 8 a.m. to 4:30 p.m., Monday through Friday except holidays and official closings. Patients are seen on a walk-in basis. The counseling center hours are 8 a.m. to 4:30 p.m., Monday through Friday. Students are seen by appointment for counseling services with the exception of emergencies. For more information, visit us on the Web at http://www.moreheadstate.edu/ucc/.

Outreach Education The staff of Counseling & Health Services is available for educational programming and classroom presentations on personal, social, psychological, and medical topics. For more information, call 606-783-2024 or 606-783-2123.

Alcohol and Other Drug Education The Alcohol and Other Drug counselor provides a variety of educational programming address-
International Student Services

The Director for International Student Services provides assistance and support during international student entry to MSU, coordination and documentation of compliance with immigration regulations, and cross-cultural programs for international education. International students must consult the Office of International Student Services at the beginning of each semester to register in SEVIS and when:

1. applying to extend or change immigration status;
2. transferring to or from the University;
3. dropping classes below a full-time enrollment;
4. leaving the University for any reason;
5. accepting employment for the first time or engaging in summer employment;
6. changing residence/phone numbers;
7. seeking optional or curricular practical training;
8. applying for a Social Security number;
9. planning to leave and reenter the United States, while still a student;
10. applying for reinstatement;
11. changing from one academic level to another;
12. changing from one academic program to another; and
13. seeking dependent status for spouse and/or children.

The Director for International Student Services is available at 422 University Blvd., Morehead, KY 40351 or by telephone 606-783-2096 or 606-783-2726.

International students attending Morehead State University are required to purchase the insurance plan designed specifically for international students or show proof of comparable coverage valid in the United States. Questions regarding the plan and proof of comparable coverage should be directed to the administrative specialist, Counseling & Health Services, 112 Allie Young Hall, telephone 606-783-2024.

Alumni Association

The MSU Alumni Association Inc. is an organization operated exclusively for educational and charitable purposes designed to stimulate interest in Morehead State University. Active membership in the MSU Alumni Association Inc. is available to all graduates and former students who make an annual contribution to the MSU Foundation Inc. All graduates receive publications of the association. Active members receive several benefits such as discounts on concert tickets and season football or basketball tickets, alumni scholarship eligibility for children, grandchildren, or the student’s spouse, and invitations to special events and activities.

The Alumni Association plans and coordinates Homecoming Weekend in the fall of each year for alumni to return to MSU for a variety of activities. The Alumni Association also coordinates the Graduation Celebration activities, the alumni awards banquet, and other activities tailored to alumni interests. For more information, visit us on the Web at http://www.moreheadstate.edu/advancement/.

Automobile Registration

A valid Morehead State University parking permit is required for any motor vehicle and motorcycle operated on the campus. Registration information is available from the Traffic Office of the MSU Police Department, 100 Laughlin Health Building, 606-783-2220 or on the web at http://www.moreheadstate.edu/police/index.aspx?id=193.

Camden-Carroll Library

Camden-Carroll Library is the information center of Morehead State University. The Library’s collections of books, journals, newspapers, and government documents, in both print and electronic format support the University’s curriculum and provide a wealth of materials to meet students’ research, recreational, and personal enrichment needs. The library has public workstations located throughout the building to afford students access to a large variety of Web-based resources, including the most relevant online journals and databases.

The goal of the Camden-Carroll Library is to promote information literacy skills which include the ability to find, evaluate, and use information effectively and ethically. The Reference staff provides students with one-on-one help with searching for and finding materials in the library and online, in person or remotely through virtual chat or e-mail. Instructional Services staff provides subject and assignment specific instruction for individual classes and also conducts building tours. The Library also offers two courses to help students improve these skills: LSIM 101: Introduction to Library Research and LSIM 201: Living in an Information Society. Through its Interlibrary Loan services, the Library participates in state and national resource-sharing networks to deliver materials not held in Camden-Carroll Library. This includes print materials and electronic delivery of certain items.

The Regional Campus Library Services Office is responsible for providing research, document delivery, and instructional services to the faculty and students in any of MSU’s Regional Campuses, Distance Learning, or Internet Programs.

The Learning Resource Center (LRC) is a multi-media center containing computer software, video recordings and DVDs, audio cassettes and CDs, kits, and teaching aids, as well as children’s literature and a preschool-grade 12 collections of textbooks and curriculum guides.

The Learning Technology Lab consists of workstations providing hardware and software for creating computer graphics, websites, and presentations. The lab includes color scanners, digital cameras, video capture/edit capability, color printers, and a wide variety of software packages. Staff is on hand to assist students with their technology needs.

The Library is open seven days a week when classes are in session. Call 606-783-2200 to request services or obtain further information including hours of operation or visit the Library Web site at www.moreheadstate.edu/library.

Cooperative Education

This is a course designed to provide experiential learning through cooperative education and internships in a community or field-
based setting. Students will be engaged in pre-professional positions under supervision by a site supervisor and faculty member. Students are awarded academic credit for work experience. A Learning Contract must be submitted prior to registration. For additional information, contact the Office of Career Services, 428 University Blvd., (606) 783-2233.

**Career Services**

The Office of Career Services, located at 428 University Blvd., provides a full range of career-related services to current students and alumni. Services include interest testing, career counseling, career development workshops, job search assistance, letter and resume evaluation, mock interviews, on-campus interviews with employers, and special career fairs and events. Students looking for part-time jobs, summer jobs, internships, and full-time employment after graduation can register to use the online JobLink System. The office is open from 8 a.m. to 4:30 p.m. each weekday. Walk-in appointments are accepted; however, appointments made in advance are recommended. For additional information, visit us on the Web at http://www.moreheadstate.edu/career/.

**Government Seminars and Internships**

The Washington Center National Government Seminar and Internship Program provides MSU students with the opportunity to study and work in Washington, D.C. The program, available to most undergraduate majors, provides both two-week intensive seminar and semester-long internships during the academic year and summer.

The seminar addresses major current legal, political, domestic, and foreign policy issues. A central feature of the seminar is the participation of persons currently involved in national political life as guest lecturers and discussion leaders. The internships have a study and work component, an evening course and a full-time government work experience. The course, held once a week, is taught by the Washington Center’s faculty drawn from Washington, D.C., colleges and universities. The internships are full-time work experiences in the offices of representatives and senators, on congressional committees and subcommittee staffs, and in government departments and regulatory commissions. The Washington Center provides housing and an on-site staff responsible for administration, placement, orientation, supervision, and evaluation for both seminars and internship participants.

Registration procedures, participation, evaluation, and the receipt of academic credit are governed by the MSU-Washington Center affiliation agreement with MSU. The seminars carry three semester hours credit and the internships carry up to 15 semester hours of credit. For additional information and application forms, contact the Director of Career Services, 428 University Blvd. or call 606-783-2233.

**International Education Study Abroad Programs**

Morehead State University offers students a variety of study abroad opportunities in various countries around the world. The majority of these programs grant academic credit upon successful completion of the program. For any study abroad program that awards academic credit, students may apply for any student loans or grants for which they would normally be eligible.

As a member of the Cooperative Center for Study Abroad consortium, the University is able to send faculty and students to English-speaking countries such as England, Scotland, Ireland, Ghana, Australia, Jamaica, Belize and India for educational offerings in a variety of subject areas. Programs are scheduled during the December/January interim, summer sessions, or the spring semester. Internships are also available. Students can earn from three to six credit hours depending on the length of the program in which they are enrolled.

MSU is a participant in the Kentucky Institute for International Studies, a consortium allowing University faculty and students to travel to study centers around the world, including such countries as France, Austria, Italy, Greece, Spain, China, Costa Rica, Denmark, Ecuador, Germany, Japan, Mexico, and Turkey. Courses are offered during the summer sessions and focus on languages, the humanities, social sciences, business, education, and environmental sciences. Full semester programs are also available in Germany, France, Mexico, and Spain.

The newest consortium to which Morehead State University belongs is the Magellan Exchange. While focusing in the past on business courses, the Exchange has begun to broaden its offerings. Students participate in semester or yearlong exchanges in European member institutions. Paying tuition to Morehead State University, U.S. students take courses offered in English. Countries included in the Magellan Exchange are Germany, France, Belgium, The Netherlands, Finland, Spain, Austria, Costa Rica, Mexico and South Korea. Opportunities to have internships while attending classes are also available.

Morehead State University sponsored programs may be offered to various locations by MSU professors. These programs are advertised by the professors; information is available in the Office of International Student Services. MSU offers a month long summer program to provide oral English training in Guangxi, China.

Additional information about any study abroad opportunity may be obtained by accessing the international education Web page (www.moreheadstate.edu/oie), or by contacting the Director of International Student Services, 422 University Blvd., Morehead State University, Morehead, KY 40351 or by calling 606-783-2096 or 606-783-2726.

**Honors Program**

The George M. Luckey Academic Honors Program is an academically-enriched program that provides highly motivated students with small classes, direct and personal contact with faculty members and involvement in their research, and greater curriculum flexibility. No more than 40 students per year will be admitted to the program; those who are admitted will receive the Honors Scholarship. This scholarship covers tuition, fees, room and board, books, and a lease of a laptop computer. Honors students will also receive up to $1500 towards the cost of a required overseas experience.

For more information or application forms, contact the Honors Program Director, Honors House, 209 Elizabeth St., Morehead, KY 40351-1689, 606-783-2807 or 606-783-2726 or visit the Honors Program website at http://www.moreheadstate.edu/honors/index.aspx?id=1698. Additional scholarship information is available at this link: http://www.moreheadstate.edu/scholarships/index.aspx?id=5199.
The LEAD Program

The LEAD Program (LEAD) consists of a progressive cluster of leadership courses that deal with leadership principles and leadership skill building in a contemporary setting. A major focus of this program is the civic engagement of each student in campus, community, state, national, and international issues with a situation analysis and decision-making emphasis. Each student participates in community service through a variety of service learning projects. For more information, contact the office at (606) 783-2027 or (606) 783-5399.

Academic and Honors Organizations

Numerous organizations offer opportunities for academic enrichment outside the classroom. Members may participate in informal discussions with faculty and professionals, field trips, and on-campus programs. Further information is available by contacting the Office of Student Organizations at 606-783-2071 or www.moreheadstate.edu/activities and click on Student Organizations.
College of Business and Public Affairs at a Glance

Robert Albert, Dean
214 Combs Building
606-783-2174
Fax: 606-783-5025
E-mail: r.albert@moreheadstate.edu

School of Business Administration

Greg Russell, Associate Dean

Accounting, Economics & Finance
BBA - Accounting Option
BBA - Economics Option
BBA - Finance Option

Information Systems
BBA - Computer Information Systems Option
BBA - Business and Information Technology Education Option
AAB - Computer Information Systems

Management & Marketing
BBA - Management Option
BBA - Marketing Option
BBA - Small Business Management & Entrepreneurship Option
BBA - General Business Option
BA - Sport Management

School of Public Affairs

Michael Hail, Interim Associate Dean

Government and Regional Analysis
BA - Government
BA - Government with Regional Analysis and Public Policy (RAPP) Emphasis
BA - Public Policy
Government Minor
Regional Analysis and Public Policy (RAPP) Minor

Mission Statement

The mission of the School of Business Administration is to offer high quality business educational experiences that provide opportunities and choices for our students to succeed in a dynamic global environment. Our focus is on instructional excellence, complemented by diverse research, service activities, and collaborative partnerships that contribute to progress in the business discipline and the east Kentucky community.

School of Business Administration

All of Morehead State University's business school programs are accredited by AACSB International - The Association to Advance Collegiate Schools of Business: The BITE program is accredited by NCATE and the Sport Management Program is accredited by NASPE/NASSM. Accreditation by AACSB International serves to assure our stakeholders that the college has managed its resources in a manner consistent with the fulfillment of its mission by developing high quality faculty, students, resources, programs and curricula.

The School of Business Administration offers an area of concentration leading to a Bachelor of Business Administration degree with options in Accounting, Business and Information Technology Education, Computer Information Systems, Economics, Finance, General Business, Management, Marketing, and Small Business Management and Entrepreneurship.

An Associate of Applied Business degree in Computer Information Systems is also offered by the School of Business Administration. Minors in Computer Information Systems, Interdisciplinary Computing, Economics, General Business (nonbusiness majors only), and Marketing are available to all students.

Small Business Development Center

The Small Business Development Center (SBDC) serves the needs of aspiring and established entrepreneurs in East Kentucky. The MSU facility was established to provide one-on-one counseling services, continuing education programs, and management and technical assistance for prospective, as well as established, business owners. The SBDC also sponsors special projects and conducts research in areas of importance to small businesses throughout its 22-county service area. The Morehead office and the five sub-center offices in Pikeville, Ashland, Maysville, Paintsville, and West Liberty offer the following core counseling and training services: needs assessment, comprehensive business planning, market research, financial statement analysis and control, cash flow analysis and financial projections, management issues unique to small firms, and technology transfer.

Center for Economic Education

The Center for Economic Education is very active in the service region, promoting economic education for people of all ages. The Center strives to establish and promote its activities in the following ways: coordination of the Ashland Advocates, operation of a resource library of economics education curriculum at the MSU at Ashland center and MSU campus, and professional development
training for K-12 teachers in economic education activities in Ashland and in Elliott, Carter, and Johnson counties.

Business Advisory Board

The College of Business and Public Affairs has a Business Advisory Board which is composed of alumni and business leaders who have made substantial contributions in their professions. The Board works with the College to ensure that the degree programs provide students with "real life" perspectives and that its activities serve the MSU service region. Members of the board include: J. Hagan Codell, Traditional Bank; Jerry M. Johnson, Bank of the Bluegrass; Jeff Fraley, United States Achievement Academy; Stephanie L. Kidd, U.S. Bank; Dan Markwell, Trademark Insurance and Investments Inc.; Susan Martin, The Jockey Club Information Systems; David Michael, Inez Deposit Bank; Mark Neff, St. Claire Regional Medical Center; Randall L. Norwood, Sealmaster Bearings; John D. Sewell, Whitaker Bank Corporation; Dennis N. Wallingford, retired; Toyota Motor Manufacturing; Gary Wientjes, Morehead Clinic Pharmacy; Harold Wilson, Caswell Prewitt Reality Inc.; and Gary K. Young, Community Trust Bank.

Organizational Systems Research Association (OSRA)

The School of Business Administration is home to the international office of the Organizational Systems Research Association (www.OSRA.org). OSRA brings together professionals from the business and academic worlds with a focus on information technologies and their impact on learning and performance. Key activities include research, interdisciplinary sharing of experiences and development of improved information technology curricula for corporate, undergraduate, and graduate education. OSRA hosts an Annual International Research Conference and publishes the Information Technology, Learning, and Performance Journal, a refereed research publication in the field of organizational and end-user information systems.

Bachelor of Business Administration (BBA) General Education Requirements

Core/Distribution

The following core and distribution courses must be completed for all BBA options.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYS 101 — First Year Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ENG 100 — Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 200 — Writing II</td>
<td>3</td>
</tr>
<tr>
<td>COMM 108 — Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 152 or MATH 174 or MATH 175</td>
<td>3</td>
</tr>
</tbody>
</table>

**Core Total** | 15 |

Distribution Courses

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM I - Humanities</td>
<td>3</td>
</tr>
<tr>
<td>HUM II - Humanities</td>
<td>3</td>
</tr>
<tr>
<td>NSC I - Natural Sciences (Life Sciences)</td>
<td>3</td>
</tr>
<tr>
<td>NSC II - Natural Sciences (Physical Sciences)</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 160 - Business and Society (SBS I)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201 - Macroeconomics (SBS II)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Distribution Total** | 18 |

General Education Capstone | 3 |
**General Education Total** | 36 |

Refer to the General Education section for a complete listing of general education requirements.

Business Requirements BBA - All Options

Pre-Business Core

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 281 — Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 282 — Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>*ECON 201 — Principles of Macroeconomics</td>
<td>•</td>
</tr>
<tr>
<td>ECON 202 — Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>*MNGT 160 — Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 261 — The Legal Environment of Business Organizations</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** | 12 |

*Counted as an exchange course in General Education; not counted above.

Upper Division Business Core

Students must be admitted to the School of Business Administration degree program to be able to register for Upper Division Business Core courses. Admission requires completion of the Pre-Business Core and a cumulative Morehead State GPA of at least 2.25 for all MSU and transfer courses.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIS 321 — Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BIS 421 — Business and Technical Presentations</td>
<td>3</td>
</tr>
<tr>
<td>CIS 311 — Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON/MNGT 300 — Quant. Methods in Bus &amp; Econ</td>
<td>3</td>
</tr>
<tr>
<td>FIN 360 — Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>MKT 304 — Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 301 — Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 465 — Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td><strong>MNGT 499C — Strategic Management</strong></td>
<td>•</td>
</tr>
<tr>
<td>Any ECON course above 300</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** | 27 |

**Capstone course - not counted in total above.**

Option Requirements

All students choosing the BBA degree must complete a 27 credit hour field of specialization which is to be selected from the following fields of study and approved by the academic advisor:

- Accounting
- Business & Information Technology Education
- Computer Information Systems
- Economics
- Finance
- General Business
Management
Marketing
Small Business Management and Entrepreneurship

Choose one option from the above list

<table>
<thead>
<tr>
<th>Option Total</th>
<th>27</th>
</tr>
</thead>
</table>

Supplemental Requirements
CIS 101 - Computers for Learning 3
FIN 264 - Personal Finance 3
MATH 354 - Business Statistics 3

Supplemental Requirements Total 9

Free Electives
Electives Total 9

Business students may:
1. Apply the nine semester hours of free elective credits to Accounting, Computer Information Systems, Economics, Finance, Management, Marketing, Small Business Management & Entrepreneurship, and General Business courses. By doing so, students can create the opportunity to develop a second BBA option or business minor.
2. Apply the nine hours of free electives toward any 100-499 level course at the University.

Components of Degree Requirement
General Education (Core, Distribution, Capstone) 36
Pre-Business Core 12
Upper Division Core 27
Option Requirements 27
Supplemental Requirements 9
Free Electives 9
Degree Requirement Total for BBA 120

Completing a Second Option
Students may complete a second option; however, courses used to satisfy the requirements of one option may not be used to meet the requirements of the second option.

Bachelor of Business Administration (BBA) Program Goals

Goal 1: Our graduates will communicate effectively.
Goal 2: Our graduates will know and properly analyze ethical issues faced in business.
Goal 3: Our graduates will have a regional and global perspective of business and appreciate the growing diversity of all stakeholders.
Goal 4: Our graduates will understand the regulatory, technological, and legal aspects of business and their impact on business decisions.
Goal 5: Our graduates will be knowledgeable and skilled in the application of analytical and quantitative tools used to solve business problems.

Goal 6: Our graduates will be competent in their discipline.

Assessment Procedures
The School of Business Administration systematically assesses all BBA programs as a basis for program improvement and quality assurance. Measures used include the following:
- AACSB/EBI Undergraduate Student Satisfaction Survey
- AACSB/EBI Undergraduate Alumni Survey
- Assurance of Learning Assessment for BBA Program

General Business Minor (Non-Business Majors Only)

Business Minor Requirements
ACCT 281 — Principles of Financial Accounting 3
ACCT 282 — Principles of Managerial Accounting 3
BIS 321 — Business Communications 3
ECON 201 — Principles of Macroeconomics 3
ECON 202 — Principles of Microeconomics 3
FIN 264 — Personal Finance 3
MKT 304 — Marketing 3
MNGT 261 — The Legal Environment of Business Organizations 3
MNGT 301 — Principles of Management 3
Total 27

Accounting, Economics & Finance

Accounting

Faculty
T. Elliott, S. Meisel, K. Pierce, S. Walters, L.K. Williams

Program Competencies

Students completing the program will possess:
2. Knowledge of ethical conduct and reasoning skills.
3. Oral and written communication skills.
4. Team member skills.
5. Computer and technology skills.

Students will be qualified to design and implement accounting systems, prepare standard financial statements, analyze accounting data and statements for use in decision making, and interpret tax laws for the preparation of tax returns and tax planning.

Graduates will be prepared for entry level positions in public accounting, industry, or governmental entities, or for graduate study in accounting or other business fields.

Assessment Procedures
- Independent Competency Testing
- Alumni and Student Surveys
Bachelor of Business Administration - Accounting Option

In addition to the option courses listed below, the general education, BBA pre-business core, BBA upper division core, supplemental, and free electives must be completed. The Accounting option is composed of 27 credit hours of specialized courses in accounting.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 381</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 382</td>
<td>Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 383</td>
<td>Intermediate Accounting III</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 387</td>
<td>Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 390</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 483</td>
<td>Auditing</td>
<td>3</td>
</tr>
<tr>
<td>Approved Accounting Electives</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

**Approved electives for the Accounting Option:**
- ACCT 339 — Cooperative Education III, or
- ACCT 439 — Cooperative Education IV
- ACCT 375 — Account Analysis & Fin Dec Making
- ACCT 388 — Practice in Personal Tax Accounting
- ACCT 391 — Accounting Information Systems
- ACCT 428 — Governmental Accounting
- ACCT 482 — Advanced Accounting
- ACCT 485 — Forensic Accounting
- ACCT 487 — Advanced Tax Accounting II
- ACCT 490 — Cost Accounting II

**CPA Exam**

Kentucky accountancy law requires completion of 150 semester hours before being licensed as a Certified Public Accountant (CPA). Students can fulfill the 150-hour requirement by taking additional undergraduate or graduate hours beyond the bachelor’s degree. Any course used to fulfill a BBA/core requirement may not also be used to fulfill a BBA/accounting option requirement. In such cases, a course or courses from the list of approved electives must be substituted for the course(s) used to fulfill the BBA/Core requirement.

**Economics**

**Faculty**
A. Ahmadi, T. Creahan, T. Ghirmay, M. Yasin

**Program Competencies**

**Students completing the program should:**
1. Be prepared for entry level management trainee position in a manufacturing or service industry, in the public sector of the economy, or in any other major (profit or nonprofit) enterprise by completing a sequence of courses which prepares the student to:
   a. do basic analysis of economic and financial events,
   b. prepare written reports concerning economic and financial events useful for making managerial and other business decisions, and
c. present oral reports concerning economic and financial events.
2. Be qualified for graduate study in economics, finance, or other fields directly related to economics.

**Assessment Procedures**
- AACSB/EBI Undergraduate Student Satisfaction Survey
- AACSB/EBI Undergraduate Alumni Survey
- Test of Understanding of College Economics (TUCE) Exam
- Focus Group Survey
- COB Internal Survey
- COB Co-Op Employer Performance Appraisals

Bachelor of Business Administration - Economics Option

In addition to the option courses listed below, the general education, BBA pre-business core, BBA upper division core, supplemental, and free electives must be completed. The Economics option is composed of 27 credit hours of specialized courses in economics.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 302</td>
<td>Labor Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 455</td>
<td>Economic Development and Growth</td>
<td>3</td>
</tr>
<tr>
<td>ECON 341</td>
<td>Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 342</td>
<td>Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>ECON 350</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 351</td>
<td>Intermediate Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 410</td>
<td>History of Economic Thought</td>
<td>3</td>
</tr>
<tr>
<td>ECON 447</td>
<td>International Economics</td>
<td>3</td>
</tr>
<tr>
<td>Approved Economics Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

**Approved electives for the Economics Option:**
- ECON 302 — Labor Economics
- ECON 305 — Comparative Economic Systems
- ECON 315 — Resource Economics
- ECON 339 — Cooperative Education III, or
- ECON 439 — Cooperative Education IV
- ECON 401 — Environmental Economics
- ECON 403 — Urban and Regional Economics
- ECON 455 — Economic Development and Growth
- ECON 456 — Introduction to Econometrics
- FIN 373 — Investments
- FIN 472 — Portfolio Analysis
- FIN 485 — International Finance
- MATH 175 — Calculus I
- MATH 275 — Calculus II
- MATH 276 — Calculus III
- MATH 301 — Elementary Linear Algebra

Any course used to fulfill a BBA/Core requirement may not also count to fulfill a BBA/Economics requirement. In such cases, a course or courses from the list of approved electives must be substituted for the course(s) used to fulfill the BBA/Core requirement.

Economics Minor

ECON 201 - Principles of Macroeconomics
ECON 202 - Principles of Microeconomics
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 350 - Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 351 - Macroeconomic Theory</td>
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<tr>
<td>Approved Economics Minor Electives</td>
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<td><strong>Total</strong></td>
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### Approved Economics Minor Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 300 - Quant Methods in Business &amp; Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302 - Labor Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 305 - Comparative Economic Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON 315 - Resource Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 341 - Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 342 - Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>ECON 401 - Environmental Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 403 - Urban and Regional Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 410 - History of Economic Thought</td>
<td>3</td>
</tr>
<tr>
<td>ECON 447 - International Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 455 - Economic Development and Growth</td>
<td>3</td>
</tr>
<tr>
<td>ECON 456 - Introduction to Econometrics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Financial Option

**Finance**

**Faculty**

R. Albert, B. Grace, B. McCormick, C. Peng, B. Shi

**Program Competencies**

**Students completing the program should be qualified to:**

1. Analyze financial activities and/or events.
2. Write reports concerning financial activities and/or events.
3. Present oral reports concerning financial activities and/or events.
4. Use computer and other technological skills in their careers.
5. Demonstrate knowledge of ethical issues in finance.

**Graduates** will be prepared for entry level positions in financial management, investment management, financial institution administration, and financial planning. In addition, graduates will be qualified for graduate study in finance, economics, management, marketing, or any other field directly related to finance.

**Assessment Procedures**

- Finance Exit Exam
- Finance Exit Survey
- AACSB/EBI Undergraduate Student Satisfaction Survey
- AACSB/EBI Undergraduate Alumni Survey
- COB Co-Op Employer Performance Appraisal

### Bachelor of Business Administration - Finance Option

In addition to the option courses listed below, the general education, BBA pre-business core, BBA upper division core, supplemental, and free electives must be completed. The Finance option is composed of 27 credit hours of specialized courses in finance.

- FIN 373 — Investments
- FIN 420 — Financial Markets and Institutions
- FIN 460 — Advanced Business Finance
- FIN 485 — International Finance
- FIN 490 — Seminar in Financial Theory and Practice

**Approved Finance electives**

**Total**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT/FIN 375 — Accounting Analysis and Financial Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 387 — Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 487 — Advanced Tax Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 341 — Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 447 — International Economics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 325 — Bank Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 339 — Cooperative Education III, or</td>
<td>3</td>
</tr>
<tr>
<td>FIN 439 — Cooperative Education IV</td>
<td>3</td>
</tr>
<tr>
<td>FIN/ECON 342 — Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>FIN/MGT 365 — Financial Issues for Small Business</td>
<td>3</td>
</tr>
<tr>
<td>FIN 370 — Working Capital Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 372 — Retirement Planning and Employee Benefits</td>
<td>3</td>
</tr>
<tr>
<td>FIN 374 — Estate Planning and Taxation</td>
<td>3</td>
</tr>
<tr>
<td>FIN 376 — Risk Management and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 472 — Portfolio Analysis</td>
<td>3</td>
</tr>
<tr>
<td>REAL 331 — Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>REAL 335 — Real Estate Investment</td>
<td>3</td>
</tr>
</tbody>
</table>

**Students may choose one of four "tracks" to follow in the Finance Option**

- **Corporate Finance Track**
  - Finance Core
  - Electives chosen from Approved Finance Option Elective Courses

- **Financial Planner Track**
  - Finance Core
  - ACCT 387 — Income Tax
  - FIN 372 — Retirement Planning & Employee Benefits
  - FIN 374 — Estate Planning and Taxation
  - FIN 376 — Risk Management and Insurance

- **Financial Analyst Track**
  - Finance Core
  - FIN 472 — Portfolio Analysis
  - Electives chosen from Approved Finance Option Elective Courses

- **Real Estate Track**
  - Finance Core
  - REAL 310 — Real Estate Law
  - REAL 400 — Real Estate Brokerage Management
  - Real Estate Electives:
    - REAL 105, REAL 200, REAL 303, REAL 309, REAL 320, REAL 325, REAL 330, REAL 331, REAL 335, REAL 345, REAL 399, REAL 425, REAL 439, REAL 476

Any course used to fulfill a BBA/Core requirement may not also be used to fulfill a BBA/Finance requirement. In such cases, a course or courses from the list of Approved Finance Option Elective Courses must be substituted for the course(s) used to fulfill the BBA/Core requirement.
Management & Marketing

Management

Faculty

Program Competencies

Students completing the program will be able to:
1. Identify legal and ethical issues in business and understand appropriate courses of action.
2. Work effectively as first-line managers and leaders. Our graduates will have an understanding of motivation, leadership, and teamwork consistent with effective organizational management.
3. Understand the business and managerial tasks associated with developing and executing organizational strategies. They will understand the implications of those strategies for both the firm’s operations and its stakeholders.

Assessment Procedures
Management exit examination
College of Business Alumni Survey
College of Business Alumni Focus Groups
College of Business Student Focus Groups

Bachelor of Business Administration – Management Option

In addition to the option courses listed below, the general education, BBA pre-business core, BBA upper division core, supplemental, and free electives must be completed. The Management option is composed of 27 credit hours of specialized courses in management.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNGT 306</td>
<td>Production and Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 310</td>
<td>Small Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 311</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 463</td>
<td>Law and Ethics of Business</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 475</td>
<td>Business Leadership and Teamwork</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

Students must choose a "track" to complete the Management Option.

Management Track (General)

Management Option Core 15
MNGT 450 — Supply Chain Management 3
Electives from Approved Electives for Management 3
Option (must be MNGT prefix) 3
Business Elective chosen from Approved Electives for Management Option 6

Track Total 27

International Management Track

Management Option Core 15
ECON 447 — International Economics or 3
FIN 485 — International Finance 3
MKT 469 — International Marketing 3
MNGT 409 — International Management 3

Electives chosen from Approved Electives for Management Option 3

Track Total 27

In addition, students in the International Management Track will be required to complete:
1. Six hours of study in a foreign language or its equivalent (as approved by the department chair); and
2. IST 301 — International Studies Study Abroad, one hour credit for participation in a Kentucky Institute of International Studies (KIIS), Cooperative Center for Study Abroad (CCSA) program, or another international study program pre-approved by the department chair.

Approved Electives for the Management Option
ECON 447 — International Economics 3
FIN 342 — Money and Banking 3
FIN 373 — Investments 3
MKT 345 — Marketing Strategies for Small Business 3
MKT 350 — Professional Selling 3
MKT 354 — Consumer Behavior 3
MKT 451 — Retail Marketing 3
MKT 452 — Market Research and Analysis 3
MKT 469 — International Marketing 3
MNGT 339 — Cooperative Education III, or 3
MNGT 439 — Cooperative Education IV 3
MNGT 362 — The Legal Envir. & Business Practices 3
MNGT/FIN 365 — Financial Issues for Small Business 3
MNGT 399 — Selected Workshop Topics 3
MNGT 409 — International Management 3
MNGT 411 — Labor Relations 3
MNGT 417 — Management and Marketing of Public and Non-Profit Organizations 3
MNGT 420 — New Venture Creation 3
MNGT 425 — Training and Development in Industry 3
MNGT 476 — Special Problems in Management 3
REAL 105 — Principles of Real Estate 3
REAL 309 — Real Estate Land Planning and Development 3
REAL 330 — Real Estate Property Management 3
REAL 335 — Real Estate Investment 3

Small Business Management & Entrepreneurship

Faculty
A. Hassan, F. Mohamed

Program Competencies

Upon successful completion of the program, the student should be able to:
1. Understand the essential requirements for the successful planning of a new venture and be aware of the issues involved in initiating a new venture.
2. Understand how to create, find, control, and use necessary resources to build a growth-oriented venture by improving a student's ability to analyze, articulate, present, and defend chosen entrepreneurial activities recognizing that no one course of action is necessarily correct or the best.
3. Develop skills associated with innovative management in entrepreneurial environments where uncertainty and lack of information and resources are typical.
4. Intelligently evaluate potential start-up opportunities for personal involvement.
5. Fully understand the major components of full-cycle development of an idea into a successful enterprise.
6. Understand the components and processes involved in developing a business plan, (including marketing and financial plans).
7. Identify and understand the various technical formalities associated with the actual starting of a new business, such as obtaining permits, registering business names with government agencies, filing a corporate charter, and securing trademarks for important company identification marks.
8. Develop a projected profit and loss statement, balance sheet, and cash flow statement for a small or new business.

Assessment Procedures
- Small Business Management & Entrepreneurship exit examination
- College of Business Alumni Survey
- College of Business Student Focus Groups
- College of Business Co-op Employer Performance Appraisals

Bachelor of Business Administration - Small Business Management & Entrepreneurship Option

In addition to the option courses listed below, the general education, BBA pre-business core, BBA upper division core, supplemental, and free electives must be completed. The Small Business Management and Entrepreneurship (SBME) option is composed of 27 credit hours of specialized courses in SBME.

- MNGT 310 — Small Business Organizations  
- MNGT 311 — Human Resource Management  
- MKT 345 — Marketing Strategies for Small Business  
- FIN/MNGT 365 — Financial Issues for Small Bus  
- MNGT 420 — New Venture Creation  
- International Business Elective  

Choose one of the following courses:
- MNGT 409, MKT 469, ECON 447, or FIN 485

Approved Small Bus. Mgmt & Entrepen. electives

Total 27

Approved Electives - Small Business Management and Entrepreneurship Option

- MNGT 339 - Cooperative Education III, or  
- MNGT 439 - Cooperative Education IV  
- MNGT 463 - Law & Ethics in Business  
- MNGT 475 - Leadership  
- MNGT 476 - Special Problems in Management  
- MKT 340 - E-Marketing and Social Networking  
- REAL 105 - Real Estate Principles  
- FIN 370 - Working Capital Management  
- CIS 211 - Advance Microcomputer Applications  
- BIS 320 - Web Tech. & Informational Architecture  

Additional International Course

Choose one of the following courses:
- Must be a different course than International Business Elective
- MNGT 409, MKT 469, ECON 447, or FIN 485

Marketing

Faculty
- K. Henderson, M. Kunz, B. Lyons

Program Competencies

Students completing the program should possess the ability to:
1. Demonstrate a general knowledge of key marketing principles.
2. Demonstrate knowledge of problem solving techniques.
3. Analyze comprehensive cases describing organizations, identify problems or decisions associated with marketing, and plan courses of action for solving the problems or making decisions.

Assessment Procedures
- Comprehensive Marketing Exit Exam
- Comprehensive Marketing Case Analysis

Business Administration - Marketing Option

In addition to the option courses listed below, the general education, BBA pre-business core, BBA upper division core, supplemental, and free electives must be completed. The Marketing option is composed of 27 credit hours of specialized courses in marketing.

- MKT 354 — Consumer Behavior  
- MKT 365 — Services Marketing  
- MKT 452 — Marketing Research and Analysis  
- MKT 495 — Marketing Strategies  
- Approved Marketing electives  

Approved Electives for the Marketing Option

- MNGT 325 — Marketing Ethics and Social Responsibility  
- MKT 339 — Cooperative Education III or  
- MKT 439 — Cooperative Education IV  
- MKT 340 — E-Marketing and Social Networking  
- MKT 345 — Marketing Strategies for Small Business  
- MKT 350 — Professional Selling  
- MKT 375 — Sustainable Marketing  
- MKT 380 — Corporate Marketing Strategies  
- MKT 451 — Retail Marketing  
- MKT 454 — Integrated Marketing Communication  
- MKT 455 — Advertising  
- MKT 469 — International Marketing  
- MKT 476 — Special Problems in Marketing  

Minor in Marketing

Requirements for Marketing Minor

- MKT 304 — Marketing  
- MKT 350 — Professional Selling  
- MKT 354 — Consumer Behavior  

Total 27
MKT 454 — Integrated Marketing Communication 3
Approved Marketing Minor electives 12
Total 24

Approved Electives for the Marketing Minor
MKT 340 — E-Marketing and Social Networking 3
MKT 345 — Marketing Strategies for Small Business 3
MKT 365 — Services Marketing 3
MKT 451 — Retail Marketing 3
MKT 469 — International Marketing 3

General Business Option
In addition to the option courses listed below, the general education, BBA pre-business core, BBA upper division core, supplemental, and free electives must be completed. The General Business option is composed of 27 credit hours of specialized courses in general business.

The option is comprised of one required course in Accounting, Information Systems, Economics and Finance, Management, Marketing, Real Estate, International Business, and two approved business electives.

Choose one of the following:
ACCT 375, ACCT 381, ACCT 387, or ACCT 390 3
Choose one of the following: Information Systems 3
CIS 211, CIS 320, CIS 322, CIS 330, CIS 340, CIS 360, CIS 413, or CIS 426
Choose one of the following: Economics and Finance 3
FIN 360, FIN 370, FIN 373, FIN 375, ECON/FIN 342, FIN 420, or ECON 351
Choose one of the following: Management 3
MNGT 306, MNGT 310, MNGT 311, or MNGT 463
Choose one of the following: Marketing 3
MKT 340, MKT 345, MKT 354, MKT 365, or MKT 452
Complete the following: Real Estate 3
REAL 105
Choose one of the following: International Business 3
ECON 447, FIN 485, MKT 469, or MNGT 409
Business Electives: Any courses 300 or above, for which prerequisites are met and that are not used to fulfill any other requirements in the following areas: ACCT, CIS, ECON, FIN, MKT, MNGT, REAL, including a maximum of three hours of cooperative education.
Total 27

Sport Management

Faculty
S. Chen, J. Hypes, M. Hypes

Program Competencies
The student will demonstrate competencies in the following areas:
1. Demonstrate an understanding and application of sport management content and concepts.
2. Demonstrate an understanding of other disciplines and how they relate to sport management.
3. Demonstrate the ability to be an effective decision maker in the sport business process.
4. Demonstrate the skills and techniques (including technology) needed for a successful career in sport management.
5. Demonstrate the knowledge and activities necessary to serve a diverse sport consumer population.
6. Demonstrate the knowledge and skills necessary to effectively manage a sport or physical activity organization.
7. Demonstrate appropriate communication skills, both written and verbal, with various sport management constituencies.
8. Demonstrate the ability to evaluate sport or physical activity programs, products, and services.
9. Demonstrate the ability to work effectively as an individual and as a member of a team

These competencies align with the NASPE/NASSM Sport Management Program standards.

Assessment Procedures
Senior capstone course

Bachelor of Arts (BA) - Sport Management Area of Concentration

General Education Requirements - CORE/Distribution
The following CORE and Distribution courses must be completed by all BA - Sport Management students.

CORE
FYS 101 — First Year Seminar 3
ENG 100 — Writing I 3
ENG 200 — Writing II 3
COMM 108 — Fundamentals of Speech Communication 3
MATH (131, 135, 152, 174, or 175) 5
CORE Total 15

Distribution
HUM I - Humanities 3
HUM II - Humanities 3
NSC I - Natural Sciences (Life Sciences) 3
NSC II - Natural Sciences (Physical Sciences) 3
SBS I - Social and Behavioral Sciences 3
SBS II - Social and Behavioral Sciences 3
Distribution Total 18

Additional General Education Requirements
SPMT 499C — Senior Capstone 3
General Education Total 36

Refer to the General Education section for a complete listing of general education requirements.

Sport Management Area of Concentration Requirements
All students choosing the BA - Sport Management degree must complete 21 credit hours of core electives and 59 credit hours of Sport Management Area of Concentration courses.
Core Electives
Students select 21 hours from the following list based on their interests and career objectives.

ACCT 281 — Principles of Financial Accounting 3
BIS 321 — Business Communications 3
CIS 311 — Management Information Systems 3
CMAP 366 — Desktop Publishing & Pub. Tech II 3
CMAP 382 — Principles of Public Relations 3
CMAP 383 — Principles of Advertising 3
CMEM 320 — Advertising & Sales for Elect. Media 3
CMEM 390 — Electronic Media Web Layout & Design 3
CMJN 492 — Media Law and Ethics 3
COMM 367 — Intro to Organizational Communication 3
COMM 385 — Persuasion 3
COMM 390 — Conflict and Communication 3
COMM 401 — Communication and Leadership 3
ECON 202 — Principles of Microeconomics 3
MKT 304 — Marketing 3
MKT 350 — Professional Selling 3
MKT 354 — Consumer Behavior 3
MKT 454 — Integrated Marketing Communication 3
MNGT 261 — The Legal Envir. of Business Org. 3
MNGT 301 — Principles of Management 3
MNGT 311 — Human Resource Management 3
MNGT 463 — Law and Ethics in Business 3

**Total** 21

Area of Concentration Courses - Sport Management

SPMT 100 — Introduction to Sport Management 3
SPMT 102 — Diversity in Sport and Phys. Act. 3
SPMT 204 — Sport Finance 3
SPMT 206 — Ethics in Sport and Physical Activity 3
SPMT 304 — Sport Economics 3
SPMT 307 — Sport Marketing 3
SPMT 309 — Risk Mngt. in Sport and Phys. Act. 3
SPMT 310 — Governance in Sport 3
SPMT 380 — Sport Media Relations 3
SPMT 402 — Planning, Designing and Managing Sport and Physical Activity Facilities 3
SPMT 430 — Sport in a Global Society 3
SPMT 450 — Field Experience Preparation 2
SPMT 471 — Sport Management Internship 12
SPMT 480 — Legal Aspects of Sport and Phys. Act. 3
SPMT 481 — Employee Service Management in Sport and Physical Activity Settings 3
SPMT 482 — Current Issues in Sport Management 3

**Total** 59

Program Elective

SPMT 476 — Special Problems in Sport Management 1-3

*This course is an elective and not part of the 59 credit hour program requirements.*

Free Electives

Free Electives 4

### Components of Degree Requirement

<table>
<thead>
<tr>
<th>Component</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education (CORE, Distribution, Capstone)</td>
<td>36</td>
</tr>
<tr>
<td>Core Electives</td>
<td>21</td>
</tr>
<tr>
<td>Area of Concentration Courses - Sport Management</td>
<td>59</td>
</tr>
<tr>
<td>Free Electives</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Degree Requirements</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

### Information Systems

#### Computer Information Systems

**Faculty**


With the explosive growth of the Internet and a growing dependency on information technology and digital networks in all career fields, computer competency is in high demand. The computer information systems program prepares students with the organizational and technical abilities needed for professional information technology positions in contemporary organizations. Students learn to assess business needs and develop appropriate solutions. Computer environments range from desktop hardware and software to local area networks, enterprise systems, object-oriented programming, and Internet-based technologies. Graduates typically go into positions such as systems analysts, applications programmers, Web developers, network administrators, technical support, and systems consultants.

#### Program Competencies

**Specific competencies and outcomes to be achieved by students are:**

1. Assess the need for, implement, and evaluate information technologies at the enterprise and desktop levels.
2. Demonstrate proficiency in business software applications and decision support technologies that improve performance at all organizational levels.
3. Apply approved website and information architecture design methods and principles to meet customer requirements for web development.
4. Apply problem solving and analytical reasoning skills within the framework of information systems.
5. Recognize the strategic importance of information systems as an integral part of organizational performance.
6. Demonstrate knowledge of telecommunications, networking, and multi-user, wide-area platforms.
7. Demonstrate the ability to model organizational and quantitative processes and functions as a foundation for designing information system solutions.
8. Demonstrate the ability to apply project management tools and techniques that are essential to managing information system projects.
9. Identify and design opportunities and strategies for IT enabled organizational improvement and innovation.
10. Identify methods and approaches for securing data and systems infrastructure.
11. Engage (as a team) in service-learning, IS arrangement wherein the deliverable is a proposed system to meet a client's organizational needs.
12. Demonstrate mastery of functional skills used in designing, building and managing databases that support information systems in an organization.

**Assessment Procedures**
- Graded Capstone Course Project
- Faculty-Juried Programming Project
- Committee-graded Project
- COB Co-op Employer Performance Appraisals
- AACSB/EBI Undergraduate Student Satisfaction Survey
- AACSB/EBI Undergraduate Alumni Survey

**Bachelor of Business Administration - Computer Information Systems Option**

In addition to the option courses listed below, the general education, BBA pre-business core, BBA upper division core, supplemental, and free electives must be completed. The Computer Information Systems option is composed of 27 credit hours of specialized courses in computer information systems.

**CIS Option Core Courses**
- CIS 200 — Problem Solving in Information Systems 3
- CIS 211 — Spreadsheet & Database Applications 3
- CIS 320 — Web Technologies & Design 3
- CIS 340 — Telecommunications and Networking 3
- CIS 413 — IS Design & Implementation 3
- CIS 490 — IT Project Management and Systems Project 3
- CIS Electives (can be used for track/specialization) 9

**Total** 27

Students may choose one of three "specializations/tracks" to follow in the Computer Information Systems Option or can choose three courses from the "Approved Electives for the CIS Option" course list to create a customized set of electives.

**Business Application Development Track**
- CIS Core 15
- CIS 202, CIS 205, or CIS 214 - Beginning Programming 3
- CIS 302, CIS 305, or CIS 314 - Advanced Programming 3
- CIS 426 - Database Management Systems 3

**Health Informatics Track**
- CIS 360 - Business Enterprise Systems 3
- CIS 322 - Security & Information Assurance 3
- CIS 365 - Health Informatics 3

**Information Systems Management Track**
- CIS Core 15
- CIS 360 — Business Enterprise Systems 3
- CIS 322 — Security & Information Assurance 3
- IS Elective from Approved Electives for CIS option 3

**Approved Electives for the CIS Option**
- BIS 290 — End User Application Development 3
- CIS 202 — Introduction to Programming-Visual Basic 3
- CIS 205 — Introduction to Programming-C++ 3
- CIS 214 — Introduction to Programming-Java 3
- CIS 302 — Advanced Programming-Visual Basic 3
- CIS 305 — Advanced Programming-C++ 3
- CIS 314 — Advanced Programming-Java 3
- CIS 322 — Security and Information Assurance 3
- CIS 330 — Collaborative Technologies 3
- CIS 360 — Business Enterprise Systems 3
- CIS 365 — Health Informatics 3
- CIS 398 — Practicum in IS 3
- CIS 399 — Selected Workshop Topics 1-4
- CIS 405 — Web Development Strategies and E-Commerce 3
- CIS 426 — Database Management Systems 3
- CIS 430 — Advanced Topics in IS 3
- CIS 439 — Cooperative Education 3
- CIS 442 — Network Administration 3
- CIS 443 — Advanced Computer Networking Administration 3
- CIS 476 — Special Topics 3
- CIS 480 — Cases in Information Technology 3

**Associate of Applied Business (AAB) - Computer Information Systems Area of Concentration**

The AAB degree with a CIS option prepares students for a variety of entry level positions requiring information technology skills. In addition, students may apply credit earned toward the Bachelor of Business Administration degree (BBA) CIS option upon graduation.

**Program Competencies**

**Students completing the program should be able to:**
1. Understand business fundamentals required for success in contemporary organizations.
2. Demonstrate proficiency in basic PC productivity tools.
3. Demonstrate basic skill with multi-media software and hardware.
4. Design and publish a Web page.
5. Understand the fundamentals of knowledge management.
6. Understand the requirements for effective administrative and computer support.
7. Apply the fundamentals of information systems problem solving.

**Core**
- COMM 108 — Fundamentals of Speech Communication 3
- ENG 100 — Writing I 3
- ENG 200 — Writing II 3
- FYS 101 — First Year Seminar 3
- MATH (131, 135, 152, 174, or 175) 3

**Core Total** 15

**Business Core**
- ACCT 281 — Principles of Financial Accounting 3
- BIS 321 — Business Communications 3
- CIS 311 — Management Information Systems 3
Requirements for minor in CIS

**Computer Information Systems Minor**

**Degree Requirements for Total** 60

**Requirements for minor in CIS**

- **CIS 200 — Logic and Design of Computer Programs** 3
- **CIS 202 — Introduction to Programming - Visual Basic** 3
- **CIS 205 — Introduction to Programming - C++, or COBOL** 3
- **CIS 215 — Introduction to Programming - C++, or COBOL** 3
- **CIS 305 — Advanced Programming - C++, or COBOL** 3
- **CIS 315 — Advanced Programming - C++, or COBOL** 3
- **CIS 311 — Management Information Systems** 3
- **CIS 340 — Telecommunications and Networking** 3

**Approved Electives for the CIS Minor**

- **CIS 405 — Web Development Strategies and E-commerce** 3
- **BIS 320 — Web Technologies and Information Technology Architecture** 3
- **CIS Elective from Approved Electives for CIS Minor** 3

**Total** 24

**Interdisciplinary Computing Minor**

**Required Core**

- **CIS 211 — Spreadsheet & Database Applications** 3
- **CIS 311 — Management Information Systems** 3
- **CIS 320 — Web Technologies & Design** 3
- **CIS 322 — Security & Information Assurance** 3
- **CIS 360 — Business Enterprise System** 3
- **Elective from Approved Electives for Interdisciplinary Computing Minor or career focus** 6

**Total** 21

**Approved Electives for the Interdisciplinary Computing Minor**

- **ITCD 203, MKT 370, ACCT 391, ART 309, CMAP 366, CS 172, SSE 110, SSE 120, EDEL 302, GEO 202, GEO 349, GEO 351, IET 300, IET 320.**

Other electives based upon students' career focus may be approved depending on the technology component of the course. Consult with advisor and/or Computer Information Systems department coordinator for approval.

**Business & Information Technology Education**

**Faculty**

D. Everett

The mission of the Business and Information Technology Education program is to prepare exemplary educators in business, computer, and marketing education. Forecasters reveal that the workplace will continue to become more dependent on workers who have skills in computer hardware and software, have knowledge in business and computer systems, and display the attitude to continue to learn and grow. Students who elect the teacher-training specialty in the Information Systems department are entering into an arena where they have an opportunity to impact this future by preparing their students to compete for and enter the dynamic, global work environment.
The Business and Information Technology Education program is designed for those students who are seeking certification to teach business, computer, and marketing courses in Grades 5-12. By completing this program, students are earning the Kentucky Business and Marketing Education certification. An endorsement (18 hours) also may be completed for teaching computer science.

Program Competencies
Students completing the program should acquire the following competencies:
1. Formulate objectives, courses of study, and evaluation criteria for a business and information technology education curriculum in grades 5-12.
2. Demonstrate the ability to use a variety of teaching methods and effective classroom management techniques in the business and information technology education classroom.
3. Infuse technology effectively into course content in the grades 5-12 classroom.

Students completing the program should be able to teach the following concepts as approved by the Kentucky Department of Education:
1. Develop career awareness and related skills to enable students to make viable career choices and become employable in a variety of business and marketing careers.
2. Communicate effectively as writers, listeners, and speakers in business and marketing settings.
3. Use accounting procedures to make decisions about planning, organizing, and allocating resources.
4. Analyze and interpret the legal system as it affects consumers, producers, and/or entrepreneurs.
5. Practice economic literacy through the development of economic skills, a knowledge of social and government responsibility, and an understanding of business and marketing operations.
6. Select and apply tools of technology as they relate to business and marketing situations.
7. Manage data from all of the functional areas of business and marketing needed to make effective management decisions.
8. Demonstrate entrepreneurial skills drawing from a general understanding of all aspects of business and marketing.
9. Describe the interrelationships of different functional areas of business and marketing and the impact of one component on another.
10. Apply marketing functions as they relate to products and services.
11. Develop the ability to participate in business and marketing transactions in both domestic and international arenas.

Assessment Procedures
Overall GPA of 2.5 for admission to and retention in the Teacher Education Program
Surveys of secondary supervisors of student teachers
Surveys of graduates
Exit proficiency examinations
Development of a teaching portfolio

Bachelor of Business Administration - Business and Information Technology Education (BITE)

General Education Requirements
Note: Unless otherwise indicated, the courses listed are required for Business and Information Technology Education majors.

Core
FYS 101 — First Year Seminar 3
COMM 108 — Fundamentals of Speech Communication 3
ENG 100 — Writing I 3
ENG 200 — Writing II 3
Math 152, 174, or 175 3

Core Total 15

Distribution Courses
HUM I — Humanities 3
HUM II — Humanities 3
NSC I — Natural Sciences (Life Sciences) 3
NSC II — Natural Sciences (Physical Sciences) 3
SBS I — EDF 207 — Foundations of Education 3
SBS II - ECON 201 - Principles of Macroeconomics 3

Distribution Total 18

Business Core Courses
ACCT 281 — Principles of Financial Accounting 3
ACCT 282 — Principles of Managerial Accounting 3
BIS 321 — Business Communications 3
BIS 421 — Business and Technical Presentations 3
CIS 101 — Computers for Learning 3
CIS 311 — Management Information Systems 3
* ECON 201 — Principles of Macroeconomics 3
ECON 202 — Principles of Microeconomics 3
FIN 264 — Personal Finance 3
MATH 354 — Business Statistics 3
MNGT 261 — The Legal Environment of Business Organizations 3
MNGT 301 — Principles of Management 3
MKT 304 — Marketing 3
** BIS 499C — Teaching Methods in Business & Information Technology 3

Total 36
* Counted in General Education
** Seminar (Capstone)

Program Requirements
BIS 216 — Advanced Document Processing 3
BIS 425 — Training & Development for Industry 3
CIS 211 — Advanced Microcomputer Applications 3
CIS 320 — Web Technologies & Design 3
CIS 322 — Systems Security & Information Assurance 3
CIS 340 — Telecommunications & Networking 3

Total 18
Professional Education*

**EDF 207 - Foundations of Education (SBS I exchange) 3**
EDF 211 - Human Growth and Development 3
EDF 311 - Learning Theories and Assessment in Education 3
EDMG 306 - Development and Learning in Middle Grades 3
EDSP 230 - Education of Exceptional Children 3
EDSE 483 - Classroom Organization and Mngt. for Secondary Teachers 3
EDSE 416 - Clinical Practice 12

**Total 27**

*Before enrolling in 300 and above education courses, students must apply and be admitted to the Teacher Education Program (TEP). For specific requirements, refer to the TEP information in the College of Education section of the catalog.

**Counted in General Education**

General Education (Core, Distribution, Capstone) 36
Program Requirements (Business and BITE) 54
Professional Education Requirements 27
General Elective 3

**Degree Requirements Total 120**

Teacher Education

All teacher applicants for initial certification in Kentucky shall complete the PRAXIS II Business Education content test (0100) and the Principles of Learning and Teaching test (30524) to meet the standards set by the Kentucky State Department of Education (704 KAR 20:670).

School of Public Affairs

Michael Hail, Interim Associate Dean

Department of Government and Regional Analysis

Government Major
Government Major with Regional Analysis Emphasis
Government Minor
Public Policy Major
Regional Analysis and Public Policy Emphasis
Regional Analysis and Public Policy Minor

Government Major

Faculty
M. Bessette (IRAPP), W. Green, M. Hail (IRAPP), S. Lange (IRAPP), E. Lewis, J. Masterson, J. Pidluzny (IRAPP), M. Sloan (IRAPP)

Program Competencies

Students are expected to possess:
1. The ability to exhibit knowledge of political conditions within the United States including the working of formal and informal institutions and the role of conflict, special interest, power, and inequities in the policy making process.
2. An understanding of the political systems in other countries, the relations between countries, and the functioning of international institutions. This is the basis for comparative study and evaluation of the United States political system.
3. The ability to analyze the impact of government policies on social and economic conditions in the United States and other countries.
4. The ability to recognize and value the varied nature of the human condition across individuals and culture groups through the practice of political analysis.
5. The ability to use methods of political investigation, to conduct original studies, and to present findings from those investigations in written and oral formats.
6. The ability to access and use electronic databases, information sites, and various online resources.

Assessment Procedures

Capstone course
Major Field Achievement Test
Preliminary assessment administered in GOVT 289 — Methods of Political Inquiry

Bachelor of Arts

The government major and minor provides students with the opportunity to study political ideas, institutions, and policies. The government faculty offer courses in political thought, American national, state and local government and public law, public administration, comparative government, and international relations. National government internships and seminars are available through the Washington Center. Students who study government usually pursue careers in law, teaching, or government service.

General Education Requirements

GOVT 230 — Introduction to Comparative Politics (HUM2) 3
GOVT 499C — Senior Seminar 3

**General Education Total 36**

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements (Government Major)

Required Introductory Courses

Complete the following:
GOVT 141 — United States Government 3
GOVT 180 — Introduction to Political Theory 3
GOVT 230 — Introduction to Comparative Politics 3
GOVT 289 — Methods of Political Inquiry 3

**Required Advanced Subfield Courses 12**

Choose one course in each of the four subfields:
1. American Politics (GOVT 305; 320-328; 340-349; 351-359)
2. Political Theory (GOVT 310-319)
3. Comparative Politics (GOVT 301-304, 329-339)
4. International Politics (GOVT 360-369)
Required Advanced Courses

Complete the following:
GOVT 499C — Senior Seminar 3
GOVT electives (any 300 or 400 level GOVT course) 6
Total 33

Government majors must write a senior paper in GOVT 499C. Three members of the Government faculty will read the paper. The student must receive a grade of "C" or better on the paper from two of the three faculty members to pass the course.

Components of Degree Requirement

General Education 36
Program Requirements 33
General Electives 51
Degree Requirement Total 120

Government Major-Regional Analysis Emphasis

Faculty
M. Bessette (IRAPP), W. Green, M. Hail (IRAPP), T. Hare (IRAPP), S. Lange (IRAPP), E. Lewis, J. Masterson, C. McMichael (IRAPP), S. Parkansky (IRAPP), J. Pidluzny (IRAPP), B. Reeder (IRAPP), E. Reeves (IRAPP), M. Sloan (IRAPP), P. Steele (IRAPP)

The Institute for Regional Analysis & Public Policy, MSU’s Program of Distinction, offers an emphasis of 18 hours in regional analysis combined with the government major.

Program Competencies

Students are expected to possess:

1. An understanding of the political systems in other countries, the relations between countries, and the functioning of international institutions. This is the basis for comparative study and evaluation of the United States political system.
2. The ability to analyze the impact of government policies on social and economic conditions in the United States and other countries.
3. The ability to recognize and value the varied nature of the human condition across individuals and culture groups through the practice of political analysis.
4. The ability to use methods of political investigation, to conduct original studies, and to present findings from those investigations in written and oral formats.
5. The ability to carry out studies in their area of expertise that include a significant analysis of regional resources and issues.
6. The ability to present research and policy reports that are comprehensible to audiences of various public policymakers.
7. The ability to interpret the output of regional resource analyses and their potential use in formulating public policymakers.

Assessment Procedures

Capstone course

General Education Requirements
GOVT 230 — Introduction to Comparative Politics (HUM2) 3
GOVT 499C — Senior Seminar 3

General Education Requirements
Refer to the general education requirements for a complete listing for the University.

Program Requirements (Government Major - Regional Analysis Emphasis)

Required Introductory Courses 12
GOVT 141 — United States Government 3
GOVT 180 — Introduction to Political Theory 3
GOVT 230 — Introduction to Comparative Politics 3
GOVT 289 — Methods of Political Inquiry 3

Group I Electives
Select three from the following:
GOVT 344 — Kentucky Government 3
GOVT 347 — American Public Policy 3
GOVT 351 — Public Administration 3
GOVT 364 — International Relations 3
GOVT 242 — State and Local Government 3
GOVT 329 — North American Politics: United States and Canada 3

Group II Free Electives
Any GOVT electives including courses not selected in group I.

Regional Analysis Courses 18
RAPP 201 — Society, Nature, & Development 3
RAPP 202 — Basic Computer Tech in Reg Analysis 3
RAPP 300 — Seminar in Regional Issues I 3
RAPP 350 — Practicing Regional Analysis I 3
RAPP 450 — Practicing Regional Analysis II 3
RAPP 490 — Seminar in Regional Issues II 3
General Electives 45
Degree Requirements Total 120

Government Minor

Required Introductory Courses 12
GOVT 141 — United States Government 3
GOVT 180 — Introduction to Political Theory 3
GOVT 230 — Introduction to Comparative Politics 3
GOVT 289 — Methods of Political Inquiry 3

Required Advanced Subfield Courses 9
Choose one course in three of the four subfields:
1. American Politics (GOVT 305; 320-328; 340-349; 351-359)
2. Political Theory (GOVT 310-319)
3. Comparative Politics (GOVT 301-304, 329-339)
4. International Politics (GOVT 360-369)
### Required Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GOVT elective</td>
<td>3</td>
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<td><strong>Total</strong></td>
<td><strong>24</strong></td>
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</tbody>
</table>

### Public Policy Major

#### Faculty

M. Bessette, W. Green, M. Hail, T. Hare, S. Lange, J. Masterson, C. McMichael, J. Pidluzny, S. Parkansky, B. Reeder, E. Reeves, D. Rudy, M. Sloan, P. Steele

#### Program Competencies

**Students are expected to:**
1. Understand the policy making process in the United States,
2. Understand the relationship between the different levels of government and the interaction of non-profits and organized interests,
3. Be able to identify problems, develop policy alternatives, and implement and evaluate policy, and
4. Develop proficiency in a specific policy area through elective and practicum courses.

#### Assessment Procedures

- Capstone course
- Assessment administered in RAPP 300 & 350
- Annually through WEAVE Assessment and Planning Management System

#### Bachelor of Arts

The public policy major provides students with the knowledge and skill sets necessary to understand and affect public policy making in the United States, both domestic and foreign. Students will acquire the skills to study a wide range of policy areas together with an understanding of the policy making process and the interdependencies of local, state, and federal governments in the development and implementation of policy. Students will be prepared for professional careers in any policy area in the public, non-profit, and private sectors as well as for graduate study in all areas of public policy. This is a practical, applied degree that is well-suited to providing students with the knowledge and skills necessary to help their communities and region move forward and prosper.

### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PPOL 499C — Senior Seminar in Public Policy</td>
<td>3</td>
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<tr>
<td><strong>General Education Total</strong></td>
<td><strong>36</strong></td>
</tr>
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</table>

Refer to the General Education section for a complete listing of general education requirements.

### Program Requirements (Public Policy Major)

#### Required Courses

*Complete the following:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAPP 101 — Introduction to Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 203 — Society, Nature and Development</td>
<td>3</td>
</tr>
<tr>
<td>PPOL 205 — Conducting Public Policy Research</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 141 — U.S. Government</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 242 — State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 300 — Seminar in Regional Issues I</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 350 — Practicing Regional Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>PPOL 400 — Ethics in Public Policy</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Required Courses</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

#### Program Electives

Choose four of the following courses:

- PPOL 220 — Introduction to Development Policy
- PPOL 230 — Introduction to Justice Policy
- PPOL 399 — Topics in Public Policy
- RAPP 376 — Directed Research
- RAPP 450 — Practicing Regional Analysis II
- RAPP 490 — Seminar in Regional Issues II
- GOVT 347 — American Public Policy
- ECON 201 — Principles of Macroeconomics
- MNGT 301 — Principles of Management

**Total Program Electives** | **12**

### Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>36</td>
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<tr>
<td>Program Requirements</td>
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<tr>
<td>Program Electives</td>
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<tr>
<td>Minor</td>
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<tr>
<td>General Electives</td>
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<tr>
<td><strong>Degree Requirement Total</strong></td>
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</tr>
</tbody>
</table>

### Regional Analysis and Public Policy Program

#### Faculty

M. Bessette, M. Hail (Interim Associate Dean), T. Hare, S. Lange, C. McMichael, S. Parkansky, J. Pidluzny, B. Reeder, D. Rudy, E. Reeves, M. Sloan, P. Steele

The Institute for Regional Analysis and Public Policy (IRAPP) was established in January 1999 as MSU’s Program of Distinction, as designated by the Council on Postsecondary Education. IRAPP’s two divisions (Academic Programs and Applied Research, Service and Policy) integrate teaching, applied research, and public service activities to address issues, including economic development, that significantly affect east Kentucky, Appalachia, and rural America in general.

IRAPP offers an emphasis in conjunction with four undergraduate majors (environmental science, government, and sociology) that includes a unifying core of six courses in Regional Analysis and Public Policy (RAPP). RAPP students learn to examine real world issues and potentials with an awareness that multi-level systems and location affect peoples’ social, economic, political, and ecological lives. IRAPP also offers a minor that is open to students in all programs.

IRAPP’s Division of Applied Research, Service, and Policy includes the Center for Virtual Appalachia, the Center for Educational Research and Leadership, the Center for Regional Biodiversity, the Center for Justice Studies, the Small Business Development Center, the Center for Community and Economic Development, Cen-
ter for Environmental Education, the Institute for Federalism and Intergovernmental Relations, the Office of Geographic and Cartographic Services, the Kentucky Center for Geospatial Education, Research and Outreach, the Training Resource Center, and The Statesmanship Center. IRAPP's research and outreach centers bring students and faculty together with citizens, local school teachers, officials, policymakers, and political leaders to develop action plans and research projects that promote sustainable economic development in the region and address other issues and problems that challenge the region.

IRAPP provides students and faculty frequent opportunities to develop and apply knowledge to real-world problems. Since IRAPP's inception, students have worked with faculty in water testing, wetland development, forest fire modeling, forest inventory, comprehensive community planning, affordable housing development, intergovernmental management, federal public policy, e-commerce, wildlife management, mapping of hazardous materials flow, tourism development, and healthcare accessibility.

For those students who wish to pursue a master's degree, IRAPP offers a Master of Public Administration. In addition, IRAPP offers a dual degree program with the University of Kentucky's Martin School of Public Policy. IRAPP students can begin working on either master's in Public Administration during their senior year, cutting as much as a year off the time normally required to attain both degrees. The partnership will provide students opportunities to increase their quantitative and analytical skills, work with faculty and public leaders on real world problems, and ultimately prepare them for a career in public service.

The Regional Analysis Scholars Program provides scholarship awards to students who have demonstrated scholastic excellence. Awards range from $1,000 to $6,000 per year and are based on ACT composite score and GPA. More information on IRAPP is available by contacting the Associate Dean of the Institute for Regional Analysis and Public Policy, 110F Combs, Morehead, KY 40351, telephone 606-783-5419, m.hail@moreheadstate.edu.

Regional Analysis and Public Policy Emphasis

Admission Requirements
Acceptance to the Regional Analysis and Public Policy Emphasis requires a minimum ACT composite of 20 and an Admission Index of 500.

Program Competencies

The student will:
1. Understand the relation of their major program to the other fields in regional analysis.
2. Make sound verbal and written arguments that delineate a public policy.
3. Possess the quantitative and qualitative skills to understand regional analysis.
4. Understand the factors that affect and shape occupational vocations in a regional context.
5. Be able to accurately communicate with public and private individuals the meaning and applications of regional analysis.
6. Be able to present research and policy reports that are comprehensible to audiences of various public policymakers.
7. Be able to interpret the output of regional resource analyses and their potential use in formulating public policy.

The students in this program will meet the goals of Enhancement of Instruction by actively participating in a unique, intense interdisciplinary program. They will participate in service and research functions of the University and will participate in the collaborative ventures of IRAPP with regional organizations.

Assessment Procedures

Compare employment rates, salaries, and graduate school admissions with similar MSU graduates.

Emphasis: Regional Analysis and Public Policy

Required coursework:
- RAPP 201 — Society, Nature and Development 3
- RAPP 202 — Basic Computer Tech. in Regional Analysis 3
- RAPP 300 — Seminar in Regional Issues I 3
- RAPP 350 — Practicing Regional Analysis I 3
- RAPP 450 — Practicing Regional Analysis II 3
- RAPP 490 — Seminar in Regional Issues II 3

Total Required Hours 18

Regional Analysis and Public Policy Minor

Admission Requirements
Acceptance to this program requires 15 credit hours with GPA above 2.50. A personal interview will also be required for admission into the RAPP program.

Program Competencies

The student will:
1. Understand the relation of their major program to the other fields in regional analysis.
2. Make sound verbal and written arguments that delineate a public policy.
3. Possess the quantitative and qualitative skills to understand regional analysis.
4. Understand the factors that affect and shape occupational vocations in a regional context.
5. Be able to accurately communicate with public and private individuals the meaning and applications of regional analysis.
6. Be able to present research and policy reports that are comprehensible to audiences of various public policymakers.
7. Be able to interpret the output of regional resource analyses and their potential use in formulating public policy.

The students in this program will meet the goals of Enhancement of Instruction by actively participating in a unique, intense interdisciplinary program. They will participate in service and research functions of the University, and will participate in the collaborative ventures of IRAPP with regional organizations.
Assessment Procedures

Compare employment rates, salaries, and graduate school admissions with similar MSU graduates.

Minor: Regional Analysis and Public Policy

Required coursework:
RAPP 201 — Society, Nature and Development 3
RAPP 202 — Basic Computer Tech. in Regional Analysis 3
RAPP 300 — Seminar in Regional Issues I 3
RAPP 350 — Practicing Regional Analysis I 3
RAPP 490 — Seminar in Regional Issues II 3

Total Required Hours 15

Elective coursework:
Students will complete nine hours of approved 300 or 400 level courses; courses at other levels (e.g., 200) will be considered for approval on a case-by-case basis.

Elective courses will be selected in consultation with the minor advisor in order to form a coherent program of study aimed at enhancing student analytic and problem solving capacities and skills. A few examples of thematic electives include: geospatial methods, international studies, women’s studies, multidisciplinary approaches, policy studies, etc. Students must obtain approval of thematic electives from both their minor advisor and the IRAPP Associate Dean. As per general university policy, courses (required or elective) in this minor may not be concurrently counted in other minors, majors, or areas of concentration.

Total Elective Hours 9

Total Hours 24
College of Education

College of Education at a Glance

Cathy Gunn, Dean
100 Ginger Hall
606-783-2040
E-mail: c.gunn@moreheadstate.edu

Kathryn Polmanteer, Associate Dean
100 Ginger Hall
606-783-2040
E-mail: k.polmanteer@moreheadstate.edu

Department of Early Childhood, Elementary, and Special Education
BA - Interdisciplinary Early Childhood Education
BA - Child Development (nonteaching)
BA - Elementary Education P-5
BA - Special Education: Learning and Behavior Disorders P-12/P-5
BA - Special Education: Moderate and Severe Disability P-12/P-5
Major and minor in Community Support Services (non-teaching)

Department of Middle Grades & Secondary Education
BA - Middle Grades Education 5-9
BA - Middle Grades (5-9) and LBD
BA - Middle Grades (5-9) and MSD

Department of Foundational and Graduate Studies in Education
Graduate Degrees Only
Undergraduate Courses

Educational Service Unit
Teacher Recruitment Program
Teacher Education Program Admissions
Clinical Practice Placement
Clinical & Field Scheduling
Teacher Certification
Kentucky Teacher Internship Program

Teacher Education Program (TEP) and Professional Experiences

All education majors are required to complete field experiences prior to student teaching. Program specific requirements for field experiences are noted in the current TEP Handbook.

Students who complete bachelor’s degree programs leading to teacher certification are recommended for a Kentucky Statement of Eligibility to enter the Kentucky Teacher Internship Program in their first year of teaching. Students must successfully complete the PRAXIS Specialty Exam(s) and the Principles of Learning and Teaching Test with passing scores, as required by the EPSB. Program changes occur as a result of recommendations of the Kentucky Department of Education and/or the EPSB. Students should check with their advisors regarding test requirements prior to completing their programs.

Teacher Education Program

Students seeking teacher certification must apply for and be admitted to the TEP. Students will be required to meet admission standards concurrent with their application to teacher education. They must select areas of concentration and/or major(s) that are certifiable.

All students are required to purchase Folio 180, an electronic portfolio and assessment system, beginning with EDF 207. Transfer students should purchase Folio 180 at the time of transfer to MSU if EDF 207 has already been completed.

All students must demonstrate knowledge and expertise in the use of computers either through the College Level Examination Program (CLEP) or by successfully completing a computer class or approved workshop.

Teacher Education Program Policies Handbook

The Teacher Education Program Policies Handbook is revised annually. This booklet may be viewed and downloaded online at www.moreheadstate.edu/esu. The policies set forth in the current handbook must be met at the time of application.

Early Childhood, Elementary, Middle Grades, and Special Education

Students in early childhood, elementary and middle grades education must select an area of concentration in either interdisciplinary early childhood (teaching certification in birth to primary); early elementary (teaching certification in grades P-5); or middle grades (teaching certification in grades 5-9). Students in special education must select an emphasis in either learning and behavior disorders (LBD) or moderate and severe disabilities (MSD).

Within each of those areas, a student will choose dual certification in special education and either P-5 certification or 5-9 certifi-
cation and may teach in both the special education and general education.

There is also a nonteaching major in child development and a nonteaching major and minor in community support for persons with disabilities.

Secondary Education Content Areas

Students seeking initial secondary certification are required to complete a bachelor's degree from the following teaching preparation programs: biological science, business, chemistry, earth and space science, English, mathematics, physics, or social studies.

Other Education Content Areas

Students seeking certification in the following areas are required to complete a bachelor's degree in that area and will be certified in grades 5-12: agriculture, business and information technology, and industrial education.

Application to the Teacher Education Program

Any student making application to the TEP must first be admitted to the University. IET majors should apply after completing CTE 207 — Foundations of Vocational Education and EDF 211 — Human Growth and Development. Failure to apply at the sophomore level may result in an extended program.

TEP Portfolio

Students making application to the TEP must submit an electronic application/portfolio through Folio 180 to the TEP coordinator by the dates posted on the ESU Web page. The electronic application/portfolio is to include the following:

1. A resume.
2. A statement of the student’s philosophy of education, including the relationship of education to society (maximum of three typed pages, double-spaced).
3. A half-page, double-spaced, typed description of relevant experiences the student has had in working with children or youth. Supporting material may be attached.

In addition, qualifying test scores must be on file in the MSU Testing Center and qualifying grades/GPA must be indicated on MSU’s student information system (Datatel).

TEP Application for Transfer Students Admitted at Another Kentucky Institution

Transfer students who were admitted to a TEP at another Kentucky institution may submit evidence of their admission and the above portfolio materials to the TEP coordinator immediately upon admission to MSU. These students will be exempt from the interview requirement for admission to the MSU TEP. Transfer students must meet all other criteria for admission as listed below.

All students are required to purchase Folio 180, an electronic portfolio and assessment system, beginning with EDF 207. Transfer students should purchase Folio 180 at the time of transfer to MSU if EDF 207 has already been completed.

Writing Proficiency Requirement

Students applying for TEP at MSU must take the Writing Preprofessional Skills Test (PPST) and obtain a minimum score of 172. The PPST Writing test is available in two formats. Test dates and test sites (which include MSU) are listed in the Educational Testing Service Registration Booklet, which is available in the MSU Testing Center (501 Ginger Hall). The computer-based version is available in most major cities, including Lexington, Covington, and Louisville. Check the ETS website or PRAXIS Registration Bulletin for additional information and/or to schedule testing. Please allow ample time for test results to be submitted to the MSU Testing Center prior to applying for admission.

EXCEPTION: Candidates obtaining a grade of "B" or better (or CLEP) in both ENG 100 and ENG 200 will be exempted from the PPST Writing Test.

Criteria for Admission

1. The applicant must have completed 45 semester hours if the applicant is a secondary, 5-12 or P-12 major; 30 semester hours if in the interdisciplinary early childhood education (IECE), elementary (P-5), middle school (5-9), and/or special education program of study.
2. The applicant must have a minimum GPA of 2.5 on a 4.0 scale. All college courses attempted must be a part of the applicant's MSU transcript. All transfer courses, as well as MSU credit, are used in calculating the GPA.
3. The student must have a minimum ACT score of 21 with minimum subtest scores of 10; or minimum ACT score of 18, 19, or 20 with minimum subtest scores of 10 and Preprofessional Skills Test (PPST) scores of Reading 173, Math 173 and Writing 172 (this option is not available for candidates seeking admission to the P-5, P-5/LBD, or P-5/MSD programs); or 750 Graduate Record Exam (GRE); or SAT 990; or 18, 19, 20 ACT composite with a minimum of 10 on each subtest and passing scores on all required PRAXIS content area tests.
4. Successful completion of prerequisite courses, with grades of "C" or better (ENG 100, ENG 200, COMM 108, EDF 207, and EDF 211 or HS 253) and prescribed clinical and field experiences.
5. Demonstrated proficiency in oral and written communication (see "Writing Proficiency" above).
6. Demonstrate moral, ethical, and social behavior commensurate with the standards of the school and community at large.
7. Successful completion of an interview with the Department Admissions Interview Committee.
8. Transfer students who were recently admitted to a TEP at another Kentucky institution may provide evidence of their admission in lieu of the interview provided they are applying for
admission to the same program or major. Transfer students must meet all other requirements listed above.

9. All students applying to the TEP must sign a declaration affirming: (1) a commitment to upholding the Code of Ethics for Kentucky; (2) knowledge of the TEP Handbook; and (3) knowledge of requirements for certification as well as disclosing all misdemeanor and felony convictions.

Once the TEP Coordinator screens these items, students are required to go before the TEP Admission Interview Committee. This committee will make a recommendation to the Teacher Education Council about the TEP admission.

Transfers and graduate students seeking initial certification must also apply for admission to the program and meet criteria outlined above.

Transfer of appropriate education courses from another institution is contingent upon successful completion of required field experiences in the public schools and clinical experiences on campus. Documentation is required. The appropriate department in the College of Education shall approve substitution of education courses. No transfer grades below "C" are accepted in IECE, early elementary, middle grades, or special education programs.

Education courses completed more than five years prior to admission or initial admission in a provisional certification program shall be reviewed for program needs or deficiencies. The appropriate department in the College of Education shall approve substitution of education courses. No transfer grades below "C" are accepted in IECE, early elementary, middle grades, or special education programs.

Retention in the TEP is dependent upon maintaining admission requirements. Any student whose admission is deferred or suspended may reapply for admission once each semester.

**TEP Orientation Session**

After the interview, applicants must attend a TEP orientation session. The sessions will be scheduled prior to preregistration at the Morehead campus and regional campus centers. Candidates’ admissions will not be finalized and they will not be able to register for restricted courses until they have attended the orientation.

*Courses for which admission to TEP is a prerequisite:*
- AGR 392 — Methods of Instructional Technology
- AGR 478 — Clinical Practice in Agriculture
- ART 300 — Elementary Materials and Methods
- ART 301 — Field Experience in Art Education
- ART 321 — Materials and Methods for Secondary Art
- BIOL 402 — Integrated Biology, Mathematics, and Physical Sciences Teaching Methods
- BIOL 403 — Integrated Biology, Mathematics, Physical Sciences Field Experiences in Teaching
- BIS 499C — Methods of Teaching Business and Information Technology Education
- CTE 392 — Methods of Instructional Technology
- CTE 470 — Methods of Instruction
- CTE 478 — Clinical Practice
- EDEE 321 — Teaching Math in Early Elementary Grades
- EDEE 322 — Teaching Social Studies in Early Elementary Grades
- EDEE 323 — Language Arts for Early Elementary
- EDEE 331 — Reading for Early Elementary Teachers
- EDEE 423 — Clinical Practice (P-5)
- EDF 311 — Learning Theories and Assessment in Education
- EDEL 333 — Fundamentals of Elementary Education
- EDEM 499C — Seminar in Effective Teaching
- EDMG 332 — Teaching Reading in the Middle Grades Content Area
- EDMG 341 — Teaching Math in Middle Grades
- EDMG 342 — Teaching Social Studies in the Middle Grades
- EDMG 343 — Teaching Language Arts in the Middle Grades
- EDMG 446 — Clinical Practice (5-9)
- EDSE 312 — Educational Methods and Technology
- EDSE 416 — Clinical Practice Secondary
- EDSP 365 — Including Students with Diverse Needs in the Classroom
- EDSP 373 - Curriculum for Students with MSD
- EDSP 374 — Teaching Students with MSD
- EDSP 375 - Pracitcum in Education of Students with MSD
- EDSP 435 — Clinical Practice (LBD)
- EDSP 437 — Clinical Practice (MSD)
- EDSP 353 — Language Arts for Students with LBD
- EDSP 355 — Teaching Students with LBD
- EDSP 357 — Math and Content Area Teaching for Students with LBD
- EDSP 359 — Pracitcum in LBD
- EDUC 476 — Reading in the Secondary School
- EDUC 482 — Classroom Management and Assessment
- ENG 382 — Teaching Writing in Secondary Schools
- ENG 500 — Studies in English for Teachers
- FRN 405 — Linguistics and Language Teaching
- HIS 451 — Curriculum and Instruction for Social Studies
- HIS 499D — Teaching of Social Studies
- HLTH 301 — Health, Safety and Nutrition for Early Elementary
- HPE 300 — Methods of Teaching Elementary Physical Education
- HPE 302 — Methods of Teaching Elementary Health Education
- HPE 303 — Methods of Teaching Secondary Physical Education
- HPE 304 — Methods of Teaching Secondary Health Education
- HPE 499C — Senior Seminar
- IECE 416 — Infant/Toddler Program Planning
- IECE 418 — Preschool Program Planning
- IECE 425 — Clinical Practice
- MATH 402 — Integrated Biology, Mathematics, and Physical Sciences Teaching Methods
- MATH 403 — Integrated Biology, Mathematics, and Science Field Experiences in Teaching
- SCI 402 — Integrated Biology, Mathematics, and Physical Sciences Teaching Methods
- SCI 403 — Integrated Biology, Mathematics, and Science Field Experiences in Teaching
- SCI 490 — Science for the Elementary Teacher
- SCI 491 — Science for the Middle School Teacher
- SPA 405 — Linguistics and Language Teaching

**Application for Clinical Practice**

1. Application for the professional semester must be made through the Educational Service Unit. An online application for clinical practice must be submitted at the beginning of the
semester PRIOR to the clinical semester using Folio 180 electronic portfolio system (September for the Spring Semester and January for the Fall Semester).

2. Admission to the Teacher Education Program is required.
3. Applicant must have a grade point average of 2.50 on a 4.0 scale on all coursework completed (includes transfer credit).
4. Coursework completed at Morehead State University must reflect an overall 2.5 GPA.
5. A grade point average of 2.50 on a 4.0 scale in area of concentration, major(s), and academic components.
6. For all teacher education candidates, a minimum grade of "C" is required in courses requiring field experience hours AND all TEP restricted courses (those courses requiring TEP admission as a prerequisite) with an overall grade point average of 2.5 on a 4.0 scale in area of concentration, major(s), and academic components.
7. Completion of prerequisite courses.
8. A minimum average grade of 2.5 on professional education courses is required.
9. A minimum of 90 semester hours must have been completed.
10. Applicant must have a bona fide major for teacher certification. (See Curriculum Standards ST-2.)
11. Applicants must have completed a minimum of 75 percent of the course requirements in area or teaching component(s) as required by program. (To include all methods courses.)
12. One semester (12 hours minimum) in residence at Morehead State University.
13. A current physical examination must be attached to the Clinical Practice Application in Folio 180 prior to commencing the professional semester. (As per EPSB policy, a TB skin test is required.)
14. Successfully completed field experiences associated with courses in the professional education sequence.
15. As soon as a clinical practice candidate is notified by the ESU director of student teaching one semester in advance include:
   - A grade point average of 2.50 on a 4.0 scale on all coursework completed (includes transfer credit).
   - Applicant must have a grade point average of 2.50 on a 4.0 scale on all coursework completed (includes transfer credit).
   - Applicant must have a bona fide major for teacher certification. (See Curriculum Standards ST-2.)
   - Applicants must have completed a minimum of 75 percent of the course requirements in area or teaching component(s) as required by program. (To include all methods courses.)
   - One semester (12 hours minimum) in residence at Morehead State University.
   - A current physical examination must be attached to the Clinical Practice Application in Folio 180 prior to commencing the professional semester. (As per EPSB policy, a TB skin test is required.)
   - Successfully completed field experiences associated with courses in the professional education sequence.
   - As soon as a clinical practice candidate is notified by the ESU director of student teaching one semester in advance include:
   - Courses for which application must be scheduled with the director of student teaching one semester in advance include:

Prerequisite Courses

Secondary Certification Programs
EDF 207, EDF 211, EDF 311, EDSE 312, EDSP 230, EDSE 483 and required methods or field experience courses.

5-12 Certification Programs
AGR - CTE 207, EDF 211, EDSP 230, CTE 388, CTE 392, CTE 470, CTE 478
IET - CTE 207, 388, 392, 470, 478, EDF 311, EDEM 330, EDSP 230, IET 496, 499C

P-12 Certification Programs
HE - EDF 207, EDF 211, EDF 311 or EDMG 306, EDSE 312, EDSE 483, HPE 301, 302, 304, HLTH 475, 418
PE - EDF 207, EDF 211, EDF 311 or EDMG 306, EDSE 312, 483, PHED 212, 213,214, 215, 216, 217, 218, 315, 475, HPE 300 (PHED only), 301, 303 (PHED only)
BME - EDF 207, EDF 211, EDF 311, MUSC 271, MUSE 207, MUSE 215, MUSE 325, MUSH 267
Voice - MUSG 123, 124, 223, 224, MUSG 211 or 213; 212 or 214; 217 or 226,239, MUSC 471, MUSE 375 416 or
Brass/Woodwind - MUSG 123, 124, 211, 212, 213, 214, 217, 223, 224, 226, 239, MUSC 472, MUSE 376 or
Percussion - MUSG 123, 124, 211, 212, 213, 214, 223, 224, 226, 239, MUSC 472, MUSE 376 or
Orchestral Strings - MUSG123, 124, 211, 212, 213, 214, 217, 223, 224, 226, 239, MUSC 472, MUSE 376
ART - ART 301, EDF 207, 311, EDSE 312, 483, EDSP 230 and required methods or field experience courses
LBD and MSD - P-5 or Middle Grades (5-9) education requirements plus EDSP 230, 350, 356, 365, 367, 372 and
LBD - EDSP 360, 353, 355, 356, 357, 359 or
MSD - EDSP 363, 370, 371, 373, 374, 375
FRN - EDF 207, 211, 311, EDSE 312, 483, EDSP 230, FRN 405
SPA - EDF 207, 211, 311, EDSE 312, 483, EDSP 230, SPA 405

Interdisciplinary Early Childhood
For candidates admitted prior to fall 2010: EDF 207, EDEE 305, 327, HS 253, EDSP 230, 350, 363, 365, 370, 371, IECE 301, 345, 360, 361, 411
For candidates admitted fall 2010 and following: EDF 207, EDEE 305, 327, EDEC 253, 254, 255, EDSP 230, 320, 350, 363, 370, 371, IECE 301, 311, 345, 360, 361, 416, 418

P-5 Certification Program
EDF 207, 211, EDEL 302, EDEE 305, 321, 322, 323, 327,331, EDEM 330, EDSP 230, EDUC 482, HLTH 301, SCI 490

Middle Grades Certification Program
EDF 207, 211, EDEL 302, EDMG 303, EDMG 306, 332, 347, EDSP 230, EDUC 482; two courses corresponding to academic components (EDMG 341, 342, 343, SCI 491)

Courses for which application must be scheduled with the director of student teaching one semester in advance include:
AGR 478 — Student Teaching Practicum
CTE 478 — Student Teaching Practicum
EDEE 423 — Supervised Student Teaching Practicum
EDMG 446 — Supervised Student Teaching
EDSE 416 — Clinical Practice
EDSP 435 — Supervised Teaching Practicum
EDSP 437 — Student Teaching Practicum in Education of Students with Moderate and Severe Disabilities
IECE 425 — Practical Student Teaching
Recommendation for Certification

Regulations of the Kentucky Department of Education stipulate that the applicant for a teacher’s certificate (Statement of Eligibility) must be recommended by the institution offering the teacher preparation program. Recommendation for statement of eligibility will be limited to those students completing their professional semester at MSU. Since certification regulations may change, students who wish to have an institutional recommendation for a statement of eligibility must meet all certification requirements in effect at the time of their application for certification.

Application for the appropriate certificate should be completed in the semester prior to graduation. Application forms may be obtained from the Educational Service Unit, 801 Ginger Hall.

All applicants for initial certification (Statement of Eligibility) in Kentucky shall pass the appropriate PRAXIS Specialty Exams and Principles of Learning and Teaching Test.

Department of Early Childhood, Elementary and Special Education

James Knoll, Chair
A301J Ginger Hall
606-783-2598

Early Childhood Education

Faculty
E. McLaren, J. Rutland, M. Shon

Program Competencies

Competency is required in the following basic areas in the Interdisciplinary Early Childhood Education Program:

1. Function as competent early childhood teachers and caregivers for birth to primary programs through an interdisciplinary curriculum that emphasizes goals, research, and best practices relating to children and diversity.
2. Apply knowledge of the physical, psychosocial, and cognitive development of young children.
3. Address special education needs of young children through a diagnostic prescriptive teaching/learning approach.
4. Apply instructional methodology and curriculum content in laboratory experiences.
5. Use the management processes in caring for and teaching young children with and without disabilities from birth to primary programs.
7. Communicate as a child and family advocate.

Assessment Procedures IECE

GPA of 2.50
ACT scores
Interview
Completion of required field experience hours

Bachelor of Arts - Area of Concentration Interdisciplinary Early Childhood Education (IECE)

General Education

BIOL 110 — Inquiry Biology for Teachers (NSC1) 3
EDEM 499C — Seminar in Effective Teaching 3
General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University. The department suggests students take PSY 154.

Program Requirements

EDF 207 — Foundations of Education 3
EDEC 253 — Child Growth and Development 3
EDEC 254 — Preschool Administration 4
IECE 301 — At-Risk Infants and Toddlers 3
IECE 311 — Role of the Teacher: Creating a Learning Environment for Diverse Groups 3
IECE 345 — Preschool Prog for Special Needs Children 3
IECE 360 — Role of Families in Early Childhood Ed 3
IECE 361 — Positive Child Guidance 3
IECE 416 — Infant/Toddler Program Planning 3
IECE 418 — Preschool Program Planning 3
IECE 425 — Clinical Practice 12
EDEE 305 — Learning Theories and Practices in Early Ele. 3
EDEE 327 — Literature and Materials for Young Readers 3
EDEC 255 — Assessment of Young Children 3
EDSP 230 — Education of Exceptional Children 3
EDSP 320 — Introduction to Corrective Speech 3
EDSP 350 — Intellectual and Developmental Disabilities 3
EDSP 363 — Assistive Technology 3
EDSP 370 — Transdisciplinary Assessment of Students with Moderate and Severe Disabilities 3
EDSP 371 — Transdisciplinary Assessment of Students with Moderate and Severe Disabilities Field Experiences 1
Program Requirements Total 68

Supplemental Requirements

ART 121 — School Art I 3
HLTH 301 — Health, Safety, and Nutrition for Early Elementary 3
MUSE 222 — Music for the Elementary Teacher 3
PHED 315 — Motor Development and Motor Learning 3
SCI 111 — Inquiry Physical Science for Elementary Teachers 3
SCI 112 — Inquiry Earth & Space Sci. for Elem. Teachers 3
SWK 315 — Child Welfare Services or SWK 358 — Child Abuse and Neglect 3
Supplemental Requirements Total 18

Components of Degree Requirement

General Education 36
Program Requirements
Supplemental Requirements

**General Education Total** 122

**Bachelor of Arts - Area of Concentration Child Development**

**Student Competencies**

1. Students will create learning environments based on understanding of typical and atypical child development.
2. Students will articulate strategies to build relationships with and empower families and collaborate with community agencies.
3. Students will explain the rationale for assessing children, explain how to conduct developmentally appropriate assessment and use assessment data to inform teaching and program planning.
4. Students uses their knowledge of developmentally appropriate practices and academic subjects to design instruction and learning environments for children with and without disabilities.
5. Students will design/plan instruction and design learning environments for children with and without disabilities to demonstrate knowledge of developmentally appropriate practices and academic subject.
6. Students will examine legislation and public policy regarding children and families and will serve as advocates for children and families.
7. Students will design an early childhood program following state child care regulations and articulate management strategies.

**General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 110 — Inquiry Biology for Teachers (NSC1)</td>
<td>3</td>
</tr>
<tr>
<td>EDEC 499C — Senior Seminar</td>
<td>3</td>
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</tbody>
</table>

**General Education Total** 36

Refer to the General Education section for a complete listing of general education requirements for the University. The department suggests students take PSY 154.

**Program Requirements**

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<tbody>
<tr>
<td>EDF 207 — Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDEC 253 — Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDEC 254 — Preschool Administration</td>
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<td>IEC 301 — At-Risk Infants and Toddlers</td>
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<tr>
<td>IEC 311 — Role of the Teacher: Creating a Learning Environment for Diverse Groups</td>
<td>3</td>
</tr>
<tr>
<td>IEC 345 — Preschool Prog for Special Needs Children</td>
<td>3</td>
</tr>
<tr>
<td>IEC 360 — Role of Families in Early Childhood Ed</td>
<td>3</td>
</tr>
<tr>
<td>IEC 361 — Positive Child Guidance</td>
<td>3</td>
</tr>
<tr>
<td>EDEC 416 — Infant/Toddler Program Planning</td>
<td>3</td>
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<tr>
<td>EDEC 418 — Preschool Program Planning</td>
<td>3</td>
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<tr>
<td>EDEC 425 — Early Childhood Practicum</td>
<td>9</td>
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<tr>
<td>EDEE 305 — Learning Theories and Practices in Early Ele.</td>
<td>3</td>
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<tr>
<td>EDEE 327 — Literature and Materials for Young Readers</td>
<td>3</td>
</tr>
<tr>
<td>EDEC 255 — Assessment of Young Children</td>
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</tr>
<tr>
<td>EDSP 230 — Education of Exceptional Children</td>
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<tr>
<td>EDSP 320 — Introduction to Corrective Speech</td>
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<tr>
<td>EDSP 350 — Intellectual and Developmental Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>EDSP 363 — Assistive Technology</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 310 — Small Business Organization</td>
<td>3</td>
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<tr>
<td>SWK 335 — The Family</td>
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**Program Requirements Total** 67

**Supplemental Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>ART 121 — School Art I</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 301 — Health, Safety, and Nutrition for Early Elementary</td>
<td>3</td>
</tr>
<tr>
<td>MNGT 261 — The Legal Environment of Business Organizations or MNGT 301 — Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 222 — Music for the Elementary Teacher</td>
<td>3</td>
</tr>
<tr>
<td>PHED 315 — Motor Development and Motor Learning</td>
<td>3</td>
</tr>
<tr>
<td>SWK 315 — Child Welfare Services or SWK 358 Child Abuse and Neglect</td>
<td>3</td>
</tr>
</tbody>
</table>

**Supplemental Requirements Total** 18

To successfully complete the program, a student must obtain an overall GPA of 2.0 with no "Ds" in the area of concentration.

**Components of Degree Requirement**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>36</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>67</td>
</tr>
<tr>
<td>Supplemental Requirements</td>
<td>18</td>
</tr>
</tbody>
</table>

**General Education Total** 121

**Child Development Associate (CDA) Program**

The Child Development Associate (CDA) Program is a training program which offers nine hours of University approved coursework. These nine hours (three—three hour courses) fulfill the mandatory 120 clock hours of training needed to apply for the CDA credential. After training is completed, students go through an assessment process designed and implemented by the National Council for Early Childhood Professional Recognition to determine their competence in working with young children. If they successfully complete the process, a CDA credential is awarded. The CDA credential may be obtained in a center-based setting with a preschool school (3 to 5 years old) and/or infant/toddler (birth to 3) endorsement, or a family child care (birth through age 5) setting by the National Council for Early Childhood Professional Recognition (NCEER). For information about the CDA program, contact the Educational Services Unit for Child Care Services, 210 Ginger Hall or call 606-783-2896.

The three Child Development Associate classes are: EDEC 125, EDEC 150, and EDEL 250.

**Elementary (P-5) Education**

**Faculty**

Program Competencies

Based on the Teacher Standards, students graduating from the P-5 program should:
1. Demonstrate knowledge of growth and development of children.
2. Be able to assess developmental and instructional needs of children.
3. Organize an effective classroom environment which will maximize learning.
4. Effectively manage classroom behavior.
5. Develop skills in planning and implementing appropriate instructional programs for children.
6. Demonstrate appropriate interaction and communication with children, parents, and other adults working in schools.
7. Describe information about options for school and home cooperation.
8. Identify appropriate professional development activities.
9. Demonstrate knowledge of the philosophical, historical, sociological, and psychological basis of early elementary education.
10. Demonstrate knowledge of the provisions of the Kentucky Education Reform Act.
11. Demonstrate appropriate uses of technology to support classroom instruction.
12. Demonstrate the capacity to provide leadership within the school, the community, and the profession.

Assessment Procedures P-5
- GPA of 2.50
- ACT scores
- Interview
- Completion of required field experience hours
- Writing sample
- Portfolio
- PRAXIS Exams

Bachelor of Arts - Area of Concentration Early Elementary (P-5)

General Education
- BIOL 110 — Inquiry Biology for Teachers (NSC1) 3
- EDF 211 — Human Growth and Development (SBS2) 3
- EDEM 499C — Seminar in Effective Teaching 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements
- EDEE 305 — Learn. Theor. & Pract. in Early Elem 3
- EDF 207 — Foundations of Education 3
- EDSP 230 — Education of Exceptional Children 3
- EDSP 365 — Including Students with Diverse Needs 3
- (taken with Elementary II or Elementary III)
- EDEE 327 — Literature and Materials for Young Readers
- Elementary I (courses to be taken concurrently)
- EDEL 302 — Integrating Technology into the Classroom 3
- EDEM 330 — Foundations of Reading 3
- EDSP 367 — Educational Assessment 3
- Elementary II (courses to be taken concurrently)
- SCI 490 — Science for the Elementary Teacher 3
- EDEE 321 — Teaching Math in Early Elementary 3
- EDUC 482 — Classroom Management and Assessment 3
- Elementary III (courses to be taken concurrently)
- EDEE 322 — Teaching Social Studies in Early Elem. 3
- EDEE 323 — Language Arts in Early Elementary 3
- EDEE 331 — Reading in Early Elementary 3
- EDEE 423 — Supervised Student Teaching Practicum 12

Program Requirements Total 54

Supplemental Requirements
- MATH 231 — Mathematics for the Elementary Teacher I 3
- MATH 232 — Mathematics for the Elementary Teacher II 3
- MATH 330 — Geometry for Teachers 3
- SCI 111 — Inquiry Physical Science for Elementary Teachers 3
- SCI 112 — Inquiry Earth & Space Science for Elem. Teachers 3
- GEO 300 — World Geography 3
- GOVT 141 — United States Government 3
- HIS 220 — Early U.S. History or HIS 202 — American Studies 3
- HLTH 301 — Health, Safety & Nutrition for Early Elementary 3
- ART 121 — School Art I 3
- MUSE 222 — Music for the Elementary Teacher 3

Supplemental Requirements Total 33

Components of Degree Requirement
- General Education 36
- Program Requirements 54
- Supplemental Requirements 33

Degree Requirement Total 123

Special Education

Faculty
- D. Grace, S. Hawkins, J. Knoll, D. Lacy, R. Lester, A. Miller

Program Competencies

Based on Teacher Standards, students graduating from the LBD & MSD program should possess:
1. An understanding of the varied nature of exceptional children, and of the range of special programs and resources available in the public school and the community.
2. Knowledge and skills in the development of alternative individualized curricula and in the effective teaching of academic skills, including oral and written language and the content areas.
3. An understanding of the principles and techniques of behavior management, and the ability to implement those techniques in the public school classroom.
4. An ability to measure the effectiveness of ongoing special education programs, and to critically evaluate the utility of published materials.
5. An understanding of the roles and responsibilities of special education teachers in various education program settings, including due process for the identification, placement, and continuing evaluation of students in special instructional programs.

6. Knowledge of the curriculum in various areas of child development at the preschool level, together with an understanding of the characteristics of handicapped preschool children and the program modifications that they require.

7. An understanding of career education as an integral part of the P-12 curriculum including knowledge of teaching methods, materials, and outside agencies typically involved in vocational training and independent living.

8. An understanding of fundamental principles of education assessment and the ability to administer a wide range of formal and informal, academic, communication, and behavioral assessment instruments.

9. The ability to interpret formal and informal assessment data in the process of forming conclusions about student needs, implementing and evaluating individualized education programs, and designing appropriate curricula for children with learning, behavioral, or developmental needs.

10. An understanding of KERA and the full inclusion of special education students with nonhandicapped students in regular classrooms.

11. Demonstrate appropriate uses of technology to support classroom instruction.

12. Demonstrate the capacity to provide leadership within the school, the community, and the profession.

**Assessment Procedures Special Education**

- GPA of 2.50
- ACT scores
- Interview
- Completion of required field experience hours
- Writing sample
- Teacher Performance Assessment
- PRAXIS Exams

**Special Education LBD or MSD and P-5 Certification**

See "Teacher Education Program" and "Professional Experiences" requirements.

This program prepares individuals for professional certification for teaching students with disabilities in grades P-12. Students have the following four options for obtaining special education certification:

1. Certification for teaching students with Learning and Behavior Disorders (LBD, P-12) and P-5.
2. Certificate for teaching students with Moderate and Severe Disabilities (MSD, P-12) and P-5.
3. Certification for LBD P-12 and S-9. Information found under Middle Grades program in Department of Middle Grades and Secondary Education.
4. Certification for MSD P-12 and S-9. Information found under Middle Grades program in Department of Middle Grades and Secondary Education.

**Bachelor of Arts - Area of Concentration in Special Education - LBD and P-5**

**General Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 110</td>
<td>Inquiry Biology for Teachers (NSC1)</td>
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<tr>
<td>EDF 211</td>
<td>Human Growth and Development (SBS2)</td>
<td>3</td>
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<tr>
<td>EDEM 499C</td>
<td>Seminar in Effective Teaching</td>
<td>3</td>
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</tbody>
</table>

**General Education Total** 36

*Refer to the General Education section for a complete listing of general education requirements for the University.*

**Program Requirements**

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>EDF 207</td>
<td>Foundations of Education</td>
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<tr>
<td>EDEE 305</td>
<td>Learning Theories in Early Elementary</td>
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<td>EDSP 230</td>
<td>Education of Exceptional Children</td>
<td>3</td>
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<td>EDEE 327</td>
<td>Literature and Materials for Young Readers</td>
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<td>EDEE 320</td>
<td>Integrating Tech. into the Classroom</td>
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<td>EDEM 330</td>
<td>Foundations of Reading</td>
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<td>EDSF 367</td>
<td>Educational Assessment</td>
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<tr>
<td>EDEE 321</td>
<td>Teaching Math in Early Elementary</td>
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<tr>
<td>SCI 490</td>
<td>Science for Elem. Teachers</td>
<td>3</td>
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<tr>
<td>EDEE 322</td>
<td>Teaching Social Studies in Early Elementary</td>
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<tr>
<td>EDEE 323</td>
<td>Language Arts in Early Elementary</td>
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<td>EDEE 331</td>
<td>Reading in the Early Elementary</td>
<td>3</td>
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<td>EDEE 423</td>
<td>Supervised Student Teaching Practicum</td>
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<td>EDSP 350</td>
<td>Intellectual and Developmental Disabilities</td>
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<td>EDSP 353</td>
<td>Language Arts Teaching LBD</td>
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<td>EDSP 355</td>
<td>Teaching Students with LBD</td>
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<td>EDSP 356</td>
<td>Applied Behavior Analysis</td>
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<td>EDSP 357</td>
<td>Math and Content Teaching LBD</td>
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<td>EDSP 359</td>
<td>Practicum in Teaching for Students with LBD</td>
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<td>EDEE 327</td>
<td>Transitions to Adult Life</td>
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<td>EDSP 435</td>
<td>Supervised Teaching Practicum</td>
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**Program Requirements Total** 73

**Supplemental Requirements**

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<td>HIS 201</td>
<td>Global Studies or</td>
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<tr>
<td>HIS 202</td>
<td>American Studies</td>
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<tr>
<td>MATH 231</td>
<td>Mathematics for the Elementary Teacher I</td>
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<td>MATH 232</td>
<td>Mathematics for the Elementary Teacher II</td>
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<td>PSY 154</td>
<td>Introduction to Psychology</td>
<td>3</td>
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<tr>
<td>SCI 111</td>
<td>Inquiry Physical Science for Elementary Teachers or</td>
<td>3</td>
</tr>
<tr>
<td>SCI 112</td>
<td>Inquiry Earth &amp; Space Science for Elem. Tchr</td>
<td>3</td>
</tr>
</tbody>
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**Total Supplemental Requirements** 15
Components of Degree Requirement
General Education 36
Program Requirements 73
Supplemental Requirements 15
Total Degree Requirements 124

Bachelor of Arts - Area of Concentration in Special Education - MSD and P-5

General Education
BIOL 110 — Inquiry Biology for Teachers (NSC1) 3
EDF 211 — Human Growth and Development (SBS2) 3
EDEM 499C — Seminar in Effective Teaching 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements
EDF 207 — Foundations of Education 3
EDSP 230 — Education of Exceptional Children 3
EDEE 305 — Learning Theories in Early Elementary 3
EDEE 327 — Literature and Materials for Young Readers 3
Elementary I (courses to be taken concurrently)
EDSP 367 — Educational Assessment 3
EDEM 330 — Foundations of Reading 3
Elementary II (courses to be taken concurrently)
EDEE 321 — Teaching Math in Early Elementary 3
SCI 490 — Science for Elem. Teachers 3
Elementary III - next three courses (courses to be taken concurrently)
EDEE 322 — Teaching Social Studies in Early Elementary 3
EDEE 323 — Language Arts in Early Elementary 3
EDEE 331 — Reading in the Early Elementary 3

EDSP 350 — Intellectual and Developmental Disabilities 3
EDSP 363 — Assistive Technology 3
EDSP 365 — Including Students with Diverse Needs in the Classroom 3
EDSP 370 — Transdisciplinary Assessment of Students with Moderate and Severe Disabilities 3
EDSP 371 — Field Experience in Transdisciplinary Assessment and Services for Students with Moderate and Severe Disabilities 1
EDSP 372 — Transitions to Adult Life 3

MSD Block - next four courses (courses to be taken concurrently)
EDSP 356 — Applied Behavior Analysis 3
EDSP 373 — Curriculum for Students with Moderate and Severe Disabilities 3
EDSP 374 — Teaching Students with Moderate and Severe Disabilities 3
EDSP 375 — Practicum in Education of Students with Moderate and Severe Disabilities 2

EDEE 423 — Supervised Student Teaching Practicum 6
EDSP 437 — Student Teaching Practicum in Education of Students with Moderate and Severe Disabilities 6

Program Requirements Total 72
Supplemental Requirements
HIS 201 — Global Studies or 3
HIS 202 — American Studies 3
MATH 231 — Mathematics for the Elementary Teacher I 3
MATH 232 — Mathematics for the Elementary Teacher II 3
PSY 154 — Introduction to Psychology 3
SCI 111 — Inquiry Physical Science for Elementary Teachers or 3
SCI 112 — Inquiry Earth & Space Science for Elem. Teachers 3

Total Supplemental Requirements 15
Components of Degree Requirement
General Education 36
Program Requirements 72
Supplemental Requirements 15
Total Degree Requirements 123

Community Support Services
The department offers a nonteaching major and minor for students who would like work in community agencies providing guidance and support to those with disabilities. This may include positions in supported living, supported employment, service coordination, or family support. The minor is particularly appropriate for individuals majoring in psychology, social work, or other areas of human services.

General Education
MSU 499C — Senior Seminar 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements
EDF 211 — Human Growth and Development 3
EDSP 230 — Education of Exceptional Children 3
EDSP 350 — Intellectual and Developmental Disabilities 3
EDSP 356 — Applied Behavior Analysis 3
EDSP 360 — Characteristics of Individuals with Learning Disabilities 3
EDSP 363 — Assistive Technology 3
EDSP 370 — Transdisciplinary Assessment and Services for Students with MSD 3
EDSP 371 — Field Experience in Transdisciplinary Assessment and Services 1

EDSP 372 — Transition to Adult Life 3

MSD Block - next four courses (courses to be taken concurrently)
EDSP 356 — Applied Behavior Analysis 3
EDSP 373 — Curriculum for Students with Moderate and Severe Disabilities 3
EDSP 374 — Teaching Students with Moderate and Severe Disabilities 3
EDSP 375 — Practicum in Education of Students with Moderate and Severe Disabilities 2

EDEE 423 — Supervised Student Teaching Practicum 6
EDSP 437 — Student Teaching Practicum in Education of Students with Moderate and Severe Disabilities 6

Program Requirements Total 35
Supplemental Requirements
PSY 154 — Introduction to Psychology 3

Supplemental Requirements Total 3
Components of Degree Requirement

General Education 36
Program Requirements 35
Supplemental Requirements 3
Minor/Electives 46
**General Education Total** 120

**Minor**
EDSP 230 — Education of Exceptional Children 3
EDSP 350 — Intellectual and Developmental Disabilities 3
EDSP 356 — Applied Behavior Analysis 3
EDSP 363 — Assistive Technology 3
EDSP 370 — Transdisciplinary Assessment and Services 3
EDSP 371 — Field Experience in Transdisciplinary Assessment and Services 1
EDSP 372 — Transition to Adult Life 3
EDSP 450 — Practicum in Community Support 4
**Total** 23

Department of Middle Grades & Secondary Education

**Wayne Willis, Interim Chair**
601 Ginger Hall
606-783-2834

Middle Grades (5-9) Education

**Faculty**
J. Fernandez, K. Lafferty, S. Lindsey, K. Sharp, W. Willis (Interim Chair)

Program Competencies

**Based on the Teacher Standards, students graduating from the 5-9 program should:**
1. Demonstrate knowledge of the growth and development of middle grade students.
2. Describe the historical, philosophical, and psychological basis of middle grade and middle school programs.
3. Demonstrate skills in planning and implementation of instruction in several different organizational patterns.
4. Accurately assess the instruction needs of students.
5. Develop an effective system for managing the classroom.
6. Relate planning for teaching to the needs of middle grade students.
7. Identify school and community resources that could be used in instruction.
8. Plan for communication with students, parents, and other school personnel.
9. Establish cooperative relationships with other school personnel and skills in working in teams.
10. Develop a breadth of content knowledge.
11. Demonstrate knowledge of the provisions of the Kentucky Education Reform Act.
12. Demonstrate appropriate uses of technology to support and enhance instruction.
13. Demonstrate the capacity to provide leadership within the school, the community, and the profession.

Special Admission Requirements 5-9

1. GPA of 2.5
2. Successfully complete the TEP interview process.
3. Demonstrated proficiency in oral and written communication.
4. Successful completion of prerequisite courses, with a grade of "C" or better (ENG 100, ENG 200, COMM 108, EDF 207, EDF 211).
5. One of the following:
   - ACT Composite of 21 with a minimum of 10 on each subtest
   - Minimum ACT Composite of 18, 19 or 20 with a minimum of 10 on each of the sub-tests and Pre-Professional Skills Test (PPST), written format scores of: Reading 173, Math 173, Writing 172
   - Graduate Record Exam 750
   - SAT 990
   - 18, 19, or 20 ACT composite with a minimum of 10 on each subtest and passing scores on all required PRAXIS content area tests.

Assessment Procedures 5-9

- GPA of 2.50
- ACT scores
- Interview
- Completion of required field experience hours
- Writing sample
- Teacher Performance Assessment
- PRAXIS Exams

Bachelor of Arts - Area of Concentration - Middle Grades (5-9)

**General Education**
MATH 131, 135, 152, or 174 3
(MATH 152 or MATH 174 is recommended)
EDF 211 — Human Growth and Development (SBS2) 3
EDEM 499C — Seminar in Effective Teaching 3
**General Education Total** 36

Refer to the General Education section for a complete listing of general education requirements for the University.

**Program Requirements**
EDSP 230 — Education of Exceptional Children 3
EDEL 302 — Integrating Technology into the Classroom 3
EDMG 330 — Foundations of Reading for the Middle Grades 3
EDF 207 — Foundations of Education 3
EDMG 306 — Development and Learning in the MG 3
EDMG 332 — Teaching Reading in the MG Content Area 3
EDMG 347 — Literature and Materials for the MG 3
EDMG 446 — Supervised Student Teaching 12
EDUC 482 — Classroom Management and Assessment 3
Choose two courses:
EDMG 341—Teaching Math in the Middle Grades 6
and/or
EDMG 343 - Teaching Language Arts in Middle Grades
and/or
EDMG 342 - Teaching Social Studies in the MG and/or
SCI 491 - Science for Middle School Teachers or
SCI 391 - Teaching Science in Middle Grades and SCI 491
(Science Area Only)

Program Requirements Total 42
Academic Components: Students for 5-9 certification must select two academic components from English, Science, Social Studies, and Mathematics, or students may choose coursework for a single component in Science, which is pending final approval by the Educational Professional Standards Board. Students choosing the latter should consult with their academic advisor to accurately plan coursework.

Supplemental Requirement

Academic Components - A GPA of 2.5 is required in all academic components

Science Area (pending approval by the Educational Professional Standards Board)
ASTR 105 — Your Cosmic Context 3
ASTR 125 — Astronomical and Physics Methods to Explore the Universe 3
BIOL 110 — Inquiry Biology for Teachers 3
BIOL 155 — Introduction to Environmental Science 3
BIOL 352 — Animal Natural History 3
CHEM 101 — Survey of Chemistry 4
ESS 108 — Physical Geology 4
ESS 201 — Historical Geology 3
ESS 303 — Planetary Geology 3
MATH 123 — Introduction to Statistics 3
PHYS 201 — Elementary Physics I and
PHYS 201A — Elementary Physics I Lab 4
SCI 111 — Inquiry Physical Science for Elementary Teachers 3
SCI 112 — Inquiry Earth and Space Science for Elementary Teachers 3

Choose one science elective from the following:
AGR 311, BIOL 351, ESS 350, ESS 376,
ESS 379, GEO 361 or GEO 390 3

Supplemental Requirement Total 45

Language Arts
ENG 205 or ENG 394 3
ENG 211 or ENG 212 3
ENG 305 or ENG 315 3
ENG 293 or ENG 390 or ENG 391 or ENG 395 or ENG 396 3
ENG 341 or ENG 342 or ENG 360 3
ENG 392 3
COMM 350 3

Supplemental Requirement Total 21

Social Studies
ECON 101 or ECON 201 3

GEO 241 3
GEO 300 3
GOVT 141 3
HIS 201 3
HIS 202 3
HIS 210 3
HIS 220 3

Supplemental Requirements Total 24

Science
BIOL 150 or BIOL 155 or BIOL 234 (ACT of 18 or higher),
or BIOL 105 or BIOL 171 or BIOL 352 or BIOL 351 6
BIOL 110 3
ESS 108 4
CHEM 101 (must have ACT of 18 or higher or complete
MATH 091 with grade of "B" or higher) 4
PHYS 201/201A 4
SCI 111 or SCI 112 or ASTR 125 or ASTR 112 3

Supplemental Requirements Total 24

Mathematics
MATH 231 3
MATH 232 3
MATH 353 or MATH 354 3
MATH 300 3
MATH 332 3
MATH 330 3
MATH 141 and MATH 152 or MATH 174 and MATH 170 6

Supplemental Requirements Total 24

Components of Degree Requirement

General Education
Program Requirements 42
Supplemental Requirements 45-48

Degree Requirement Total 123-126

Middle Grades 5-9 and Special Education

Bachelor of Arts - Area of Concentration in Middle Grades (5-9) and LBD

General Education
MATH 131, 135, 152, or 174 (MATH 152 or MATH 174 is recommended)
EDF 211 — Human Growth and Development (SBS2) 3
EDEM 499C — Seminar in Effective Teaching 3

General Education Total 36

Program Requirements
EDSP 230 — Education of Exceptional Children 3
EDEL 302 — Integrating Tech. into the Classroom 3
EDMG 330 — Foundations of Reading for Middle Grades 3
EDF 207 — Foundations of Education 3
EDMG 306 — Development and Learning in the MG 3
EDMG 332 — Teaching Reading in the MG Content Area 3
EDMG 347 — Literature and Materials for the MG 3
EDMG 341 — Teaching Math in the Middle Grades or 3
EDMG 343 — Teaching Language Arts in Middle Grades
or
EDMG 342 — Teaching Social Studies in the MG or
SCI 491 — Teaching Science in the Middle Grades
EDMG 446 — Supervised Student Teaching 6
EDUC 482 — Classroom Management and Assessment 3
EDSP 350 — Intellectual and Developmental Disabilities 3
EDSP 353 — Language Arts Teaching LBD 3
EDSP 355 — Teaching Students with LBD 3
EDSP 356 — Applied Behavior Analysis 3
EDSP 357 — Mat and Content Area Teaching LBD 3
EDSP 359 — Practicum in Teaching for Students with LBD 1
EDSP 360 — Characteristics of Individuals with Learning Disabilities and Behavior Disorders 3
EDSP 365 — Including Students with Diverse Needs 3
EDSP 367 — Educational Assessment 3
EDSP 372 — Transition to Adult Life 3
EDSP 435 — Transition to Adult Life 3
EDSP 437 — Supervised Teaching Practicum 6

**Program Requirements Total** 67

*Academic Component: Students seeking 5-9 and LBD certification select only one component (listed above under Supplemental Requirements for standalone Middle Grades Program).*

**Components of Middle Grades 5-9 and LBD Degree**

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirements</th>
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<tbody>
<tr>
<td>General Education</td>
<td>36</td>
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<tr>
<td>Program Requirements</td>
<td>67</td>
</tr>
<tr>
<td>Supplemental Requirements</td>
<td>21-24</td>
</tr>
<tr>
<td><strong>Degree Requirement Total</strong></td>
<td>124-127</td>
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</table>

**Area of Concentration in MSD and Middle Grades (5-9)**

**General Education**

MATH 131, 135, 152, or 174 3
(MATH 152 or MATH 174 is recommended)
EDF 211 — Human Growth and Development (SBS2) 3
EDEM 499C — Seminar in Effective Teaching 3

**General Education Total** 36

**Program Requirements**

EDSP 230 — Education of Exceptional Children 3
EDMG 330 — Foundations of Reading for Middle Grades 3
EDF 207 — Foundations of Education 3
EDMG 306 — Development and Learning in the MG 3
EDMG 332 — Teaching Reading in the MG Content Area 3
EDMG 347 — Literature and Materials for the MG 3
EDMG 341 — Teaching Math in the Middle Grades or
EDMG 343 — Teaching Language Arts in Middle Grades or
EDMG 342 — Teaching Social Studies in the MG or
SCI 491 — Teaching Science in the Middle Grades
EDMG 446 — Supervised Student Teaching 6
EDUC 482 — Classroom Management and Assessment 3
EDSP 350 — Intellectual and Developmental Disabilities 3
EDSP 356 — Applied Behavior Analysis 3
EDSP 363 — Assistive Technology 3
EDSP 365 — Including Students with Diverse Needs 3
EDSP 367 — Educational Assessment 3
EDSP 370 and EDSP 371 4
EDSP 372 — Transition to Adult Life 3
EDSP 373 — Curriculum for Students with MSD 3
EDSP 374 — Teaching Students with MSD 3
EDSP 375 — Practicum in MSD 2
EDSP 437 — Supervised Teaching Practicum MSD 6

**Program Requirements Total** 66

*Academic Component: Students seeking 5-9 and LBD certification select only one component (listed above under Supplemental Requirements for standalone Middle Grades Program).*

**Secondary Education**

**Faculty**
L. Lennex, S. Riegler

The primary role of secondary education is to serve various departments of the University by offering a professional education curriculum leading to certification (Statement of Eligibility) of teachers for secondary schools. Professional education coursework is designed to prepare students to demonstrate competency on Kentucky’s New Teacher Standards developed through the Education Professional Standards Board. Courses include planned opportunities for students to engage in field experiences to learn to provide for differentiated learning experiences in diverse learning environments.

Students wishing to pursue a teaching certificate in Secondary Education will be assigned an advisor in their respective major content area. Students need to be aware that general education requirements may differ by content area. For specific program requirements, students need to obtain an official program evaluation from their advisors or the content area department chairs (e.g., Department of English for inquiries about obtaining a secondary teaching certificate in English). General information about the Secondary Education TEPs may be obtained in 801 Ginger Hall in the Educational Services Unit, 606-783-2065, or from the Department of Middle Grades and Secondary Education.

**Requirements for Certification in Secondary Education**

**Professional Education Courses**

EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment in Education
EDSE 312 — Educational Methods and Technology 3
EDSE 483 — Classroom Organization and Management for Secondary Teachers
EDSP 230 — Education of Exceptional Children 3

**Professional Semester**

EDSE 416 — Professional Semester 12
Important: For information about secondary education certification, see the subject area in which certification is being sought — i.e., English.

Secondary Education Content Areas

Students seeking initial secondary certification are required to complete a bachelor’s degree from the following teaching preparation programs: biological science, business, chemistry, earth and space science, English, mathematics, physics, or social studies.
Caudill College of Arts, Humanities & Social Sciences

Caudill College of Arts, Humanities & Social Sciences at a Glance

M. Scott McBride, Dean
212 Rader Hall
(606) 783-2650
E-mail: s.mcbride@moreheadstate.edu

School of the Arts
Art & Design
Communication, Media & Leadership Studies
Music, Theatre & Dance

School of Humanities & Social Sciences
English
History, Philosophy, Religion & Legal Studies
International & Interdisciplinary Studies
Military Science
Sociology, Social Work & Criminology

Department of Art & Design
BA - Art
BA - Art Education

Department of Communication, Media & Leadership Studies
BA - Communication with options:
   Advertising/Public Relations
   Communication Studies
   Leadership Studies
   Multimedia Journalism
   Multimedia Production

Department of English
BA - English
BA - English Education
BFA - Creative Writing

Department of History, Philosophy, Religion & Legal Studies
BA - History
BA - Philosophy
BA - Religion Studies
BA - Paralegal Studies
BA - Social Studies Education

Department of International & Interdisciplinary Studies
BA - French
BA - French Education
BA - Spanish
BA - Spanish Education
BA - Interdisciplinary International Studies

Department of Music, Theatre & Dance
BME - Music Education (with areas of specialization)
   Woodwind, Brasswind,
   Percussion
   Orchestral Strings
   Voice

BM - Music Performance (with areas of concentration)
   Woodwind, Brasswind
   Percussion
   Voice
   Keyboard
   Collaborative Piano
   Orchestral Strings
   Jazz Studies
BA - Music
BA - Theatre
BA - Theatre Education

Department of Sociology, Social Work & Criminology
BA - Sociology
BA - Criminology
BSW - Area of Concentration in Social Work

Department of Art & Design

Robert Franzini, Chair
211 Claypool-Young Art Building
606-783-2193

Faculty
D. Bartlett, B. Frieder, R. Franzini, D. Golding, S. Green, J. Gritton, D. Li, B. Kalk, E. Mesa-Gaido, G. Mesa-Gaido, J. Petsch, J. Reis

Competencies Required in the Program

Students will be able to:
1. Understand and skillfully apply various media, techniques, and technology in the production and presentation of art work.
2. Use knowledge of characteristics of visual art to effectively convey ideas.
3. Effectively choose a range of subject matter, symbols, and ideas as content for works of art.
4. Understand the visual arts in relation to history and cultures.
5. Reflect upon and assess the characteristics and merits of their work and the work of others.
6. Make connections between the visual arts and other disciplines.
7. Communicate about art effectively in written and oral form.

Assessment Procedures
Senior art history written assignment evaluated by faculty
Senior exhibit up to six works evaluated by faculty
PRAXIS exam for Art Teacher Certification students
Graduating Student Survey completed within the Senior Capstone course
Alumni survey

Bachelor of Arts
The Department of Art & Design offers programs in art education, art history, and studio art. Courses in the beginning, intermediate, and advanced levels are available in art education, art history, ceramics, computer art, drawing, graphic design, painting, photography, printmaking, and sculpture.

Program Requirements
1. Students of sophomore rank participate in the Sophomore Exhibition and Review.
2. Students of senior rank participate in the Senior Exhibition.
3. Seniors produce resumes and digital portfolios.
4. Transfer students must comply with the intent of these requirements on an individually evaluated basis.
5. A total of 12 hours from Private Applied Art courses are allowable towards degree.
6. A total of 12 hours from Internship courses are allowable towards degree.

The following courses are required General Education courses for students in the Area of Concentration and the Major in Art:
ART 499C — Visual Art Capstone 3

General Education Requirements 36

Art Major
Refer to the General Education section for a complete listing of general education requirements.

Program Requirements
ART 100 — 2D Design & Color Foundations 3
ART 102 — 3D Foundation 3
ART 109 — Digital Foundations 3
ART 112 — Drawing Foundations 3
ART 214 — Painting Techniques I 3

Choose two of three 6
ART 263 — World Arts.
ART 264 — Art History II
ART 265 — Art History III

Choose one of two 3
ART 245 — Ceramics I
ART 294 — Sculpture I

Choose one of three 3
ART 351 — Intaglio Printmaking
ART 352 — Lithographic Printmaking
ART 373 — Basic Black and White Photography
ART 304 — Drawing II 3
ART History (two 300 or higher elective) 6
ART electives 18

Program Requirements Total 54

Components of Degree Requirement
General Education 36
*Program Requirements 54
Free Electives 30

Program Requirements Total 120

Art Area with Graphic Design Emphasis—Recommended Elective Courses
ART 205 — Graphic Design I
ART 302 — Typography
ART 305 — Graphic Design II
ART 306 — Graphic Design for the Web
ART 309 — Computer Art
ART 320 — Survey of Graphic Design
ART 405 — Graphic Design III
ART 406 — Graphic Design IV
ART 410 — Computer Animation

Art Area of Concentration with Teacher Certification

Refer to the General Education section for a complete listing of general education requirements.
ART 499C - Visual Arts Capstone 3
EDF 211 - Human Growth and Development (SBS2) 3
General Education Total 36

Program Requirements
ART 100 — 2D Design & Color Foundations 3
ART 102 — 3D Foundation 3
ART 109 — Digital Foundations 3
ART 112 — Drawing Foundations 3
ART 214 — Painting Techniques I 3

Choose two of three 6
ART 263 — World Arts
ART 264 — Art History II
ART 265 — Art History III

Choose one of two 3
ART 245 — Ceramics I
ART 294 — Sculpture I

Choose one of three 3
ART 351 — Intaglio Printmaking
ART 352 — Lithographic Printmaking
ART 373 — Basic Black and White Photography

ART 300 — Elementary Materials and Methods 3
ART 301 — Field Experience in Art Education 3
ART 304 — Drawing II 3
ART 321 — Materials and Methods for Secondary Art 3
ART History (Two 300 or higher elective) 6
*ART Electives 12
Program Requirements Total 57

* A total of 12 hours from Private Applied Art courses are allowable towards degree. A total of 12 hours from Internship courses are allowable towards degree.

Other Program Requirements (Professional Education Core)
EDF 207 — Foundations of Education 3
EDF 311 — Learning Theories and Assessment of Education 3
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Mngt. for Secondary Teachers 3
EDSP 230 — Education of Exceptional Children 3
Professional Education Core Total 27

Components of Degree Requirement
General Education 36
Program Requirements 57
Professional Education Core 27
Program Requirements Total 120

Art Major with Teacher Certification

Refer to the General Education section for a complete listing of general education requirements.
ART 499C — Visual Arts Capstone 3
EDF 211 — Human Growth and Development (SBS2) 3
General Education Total 36

Program Requirements
ART 100 — 2D Design & Color Foundations 3
ART 102 — 3D Foundation 3
ART 109 — Digital Foundations 3
ART 112 — Drawing Foundations 3
ART 214 — Painting Techniques I 3

Choose two of three 6
ART 263 — World Arts
ART 264 — Art History II
ART 265 — Art History III

Choose one of two 3
ART 245 — Ceramics I
ART 294 — Sculpture I

Choose one of three 3
ART 351 — Intaglio Printmaking
ART 352 — Lithographic Printmaking
ART 373 — Basic Black and White Photography

ART 300 — Elementary Materials and Methods 3
ART 301 — Field Experience in Art Education 3
ART 321 — Materials and Methods for Secondary Art 3
*ART History (300 or higher ART history elective) 3
Program Requirements 39

* A total of 12 hours from Private Applied Art courses are allowable towards degree. A total of 12 hours from Internship courses are allowable towards degree.

Other Program Requirements (Professional Education Core)
EDF 207 — Foundations of Education 3
EDF 311 — Learning Theories and Assessment of Education 3
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Mngt. for Secondary Teachers 3
EDSP 230 — Education of Exceptional Children 3
Professional Education Core Total 27
Components of Degree Requirement

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>36</td>
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<tr>
<td>Program Requirements</td>
<td>39</td>
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<tr>
<td>Professional Education Core</td>
<td>27</td>
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<tr>
<td>Minor</td>
<td>21</td>
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<td><strong>Program Requirements Total</strong></td>
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Visual Art Minor

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ART 100</td>
<td>2D Design &amp; Color Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ART 109</td>
<td>Digital Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Drawing Foundations</td>
<td>3</td>
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<tr>
<td>ART 205</td>
<td>Graphic Design I</td>
<td>3</td>
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<tr>
<td>ART 302</td>
<td>Typography</td>
<td>3</td>
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<td><strong>Electives (choose three courses)</strong></td>
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<tr>
<td>ART 305</td>
<td>Graphic Design II</td>
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<tr>
<td>ART 306</td>
<td>Graphic Design for the Web</td>
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<tr>
<td>ART 309</td>
<td>Computer Art</td>
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<tr>
<td>ART 320</td>
<td>Survey of Graphic Design</td>
<td></td>
</tr>
<tr>
<td>ART 373</td>
<td>Basic Black and White Photography</td>
<td></td>
</tr>
<tr>
<td>ART 410</td>
<td>Computer Animation</td>
<td></td>
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<tr>
<td><strong>Visual Art Minor (minimum) credits</strong></td>
<td><strong>24</strong></td>
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</tr>
</tbody>
</table>

Studio Art Minor

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ART 100</td>
<td>2D Design &amp; Color Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ART 102</td>
<td>Three-Dimensional Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ART 109</td>
<td>Digital Foundations</td>
<td>3</td>
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<tr>
<td><strong>Choose two of three</strong></td>
<td><strong>Choose one of two</strong></td>
<td><strong>3</strong></td>
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<td>ART 263</td>
<td>World Arts</td>
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<td>ART 264</td>
<td>Art History II</td>
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<tr>
<td>ART 265</td>
<td>Art History III</td>
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<td><strong>Choose one of three</strong></td>
<td><strong>Choose one of two</strong></td>
<td><strong>3</strong></td>
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<tr>
<td>ART 245</td>
<td>Ceramics I</td>
<td></td>
</tr>
<tr>
<td>ART 294</td>
<td>Sculpture I</td>
<td></td>
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<tr>
<td><strong>Art History Minor (minimum) credits</strong></td>
<td><strong>24</strong></td>
<td></td>
</tr>
</tbody>
</table>

Department of Communication, Media & Leadership Studies

Calvin Lindell, Interim Chair

The Department of Communication, Media & Leadership Studies prepares students for professional, business, and educational careers in advertising and public relations, multimedia production, multimedia journalism, communication studies, and leadership studies.

Communication

Faculty


Bachelor of Arts in Communication Program Competencies

**Students will demonstrate:**

1. The ability to communicate effectively in written, oral, and visual forms using appropriate media and technology.
2. The ability to apply appropriate communication theories to a variety of circumstances and audiences.
3. The ability to apply appropriate ethical and legal standards to the communication process.
4. Understanding the impact of communication and related media on history, society, culture and global community.
5. The ability to identify, interpret, and analyze the characteristics and merits of communication artifacts.

Assessment Procedures

Senior Project in Capstone Course

Communication Major

The major in Communication with one of the six areas of study (referred to as options below) requires 39 semester hours including the Senior Seminar. The options are: Advertising, Public Relations, Communication Studies, Leadership Studies, Multimedia Journalism, and Multimedia Production.

*All students majoring in Communication will take the following courses:*

- COMM 110 — History of Communications Media
- COMM 220 — Introduction to Communication Theory

Advertising Option

**General Education**

- COMM 499C — Senior Seminar in Communication  
  **3**

**General Education Total**  
  **36**

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements

- COMM 110 — History of Communications Media  
  **3**
- COMM 220 — Introduction to Communication Theory  
  **3**
- CMAP 166 — Multimedia Design and Layout  
  **3**
- CMAP 277 — AD/PR Practicum  
  **1**
- CMAP 377 — AD/PR Practicum  
  **1**
CMAP 382 — Principles of Public Relations  
CMAP 477 — AD/PR Practicum  
CMAP 383 — Principles of Advertising  
CMAP 483 — Advertising Design  
CMAP 486 — Adv. Campaigns and Media Buying  

**Program Requirements Total**  
24

### Advertising Track Specialization (must choose one of three specialization areas)

**Creative Specialization**

- ART 205 — Graphic Design I  
- ART 305 — Graphic Design II  
- CMEM 390 — Media Web Layout & Design  
- Elective - choose one of the following:  
- CMEM 101 — Elements of Production I  
- CMAP 386 — Social & Interactive Media  

**Specialization Total**  
12

**Account Services & Media Planning Specialization**

- MKT 304 — Marketing  
- MKT 454 — Integrated Marketing Communication  
- CMAP 386 — Social & Interactive Media  
- Elective - choose one of the following:  
- MKT 350 — Professional Selling  
- COMM 467 — Organizational Communication  

**Specialization Total**  
12

**Promotions Specialization**

- CMEM 101 — Elements of Production I  
- CMAP 385 — Public Relations Writing  
- CMAP 386 — Social & Interactive Media  
- Elective - choose one of the following:  
- CMAP 482 — Public Relations Case Studies  
- CMEM 390 — Web Layout & Design  

**Specialization Total**  
12

### Components of Degree Requirement

**General Education**

- 36

**Program Requirements**

- 36

**Minor**

- 21-24

**General Electives**

- 24-27

**Degree Requirement Total**

- 120

### Public Relations Option

**General Education**

- COMM 499C — Senior Seminar in Communication  

**General Education Total**  
36

*Refer to the General Education section for a complete listing of general education requirements for the University.*

**Program Requirements**

- COMM 110 — History of Communications Media  
- COMM 220 — Introduction to Communication Theory  
- CMAP 166 — Multimedia Design and Layout  
- CMAP 277 — AD/PR Practicum  
- CMAP 377 — AD/PR Practicum  
- CMAP 382 — Principles of Public Relations  
- CMAP 477 — AD/PR Practicum  
- COMM 320 — Intro. to Research Methods in Communication  
- CMAP 385 — Public Relations Writing  
- CMAP 482 — Public Relations Campaigns  
- MNGT 301 — Principles of Management  

**Program Requirements Total**  
27

### Electives for Public Relations Option

*Complete nine hours from the courses below:*

- choose one of the following:  
- CMEM 390 — Web Layout & Design or  
- CMAP 386 — Social & Interactive Media  
- ACCT 281 — Principles of Financial Accounting or  
- MNGT 261 — The Legal Environ. of Business Orgs. or  
- MNGT 310 — Small Business Organizations or  
- MNGT 311 — Human Resource Management  
- CMAP 383 — Advertising Principles or  
- CMAP 483 — Advertising Copy & Design or  
- CMEM 101 — Elements of Production I or  
- CMJN 201 — Newswriting and Reporting I or  
- CMJN 358 — Sports Writing or  
- CMJN 465 — Editorial Writing or  
- CMJN 492 — Media Law and Ethics or  
- COMM 467 — Organizational Communication or  
- COMM 405 — Communication Issue Management  

In addition to the above courses, an internship with a minimum of 153 clock hours is required for credit or not for credit. Assessment of the internship will be integrated into the Senior Seminar course. If students complete the internship for credit, those hours will count toward university electives. Students must provide evidence of the successful completion of an internship prior to receiving credit in the CMAP Senior Seminar course. Completion forms are available in the departmental internship application.

### Communication Studies Option

**General Education**

- COMM 499C — Senior Seminar in Communication  

**General Education Total**  
36

*Refer to the General Education section for a complete listing of general education requirements for the University.*

**Program Requirements**

- COMM 110 — History of Communications Media  
- COMM 220 — Introduction to Communication Theory  
- CMAP 382 — Principles of Public Relations  
- CMAP 477 — AD/PR Practicum  
- COMM 320 — Intro. to Research Methods in Communication  
- CMAP 385 — Public Relations Writing  
- CMAP 482 — Public Relations Campaigns  
- MNGT 301 — Principles of Management  

**Program Requirements Total**

- 27
COMM 350 — Communication Culture, and Diversity
COMM 347 — Internship
COMM 401 — Communication & Leadership
Select seven courses (21 hours) from the following:
COMM 100 — Fundamentals of Speech Communication
COMM 210 — Listening
COMM 230 — Interpersonal Communication
COMM 309 — Public Presentations
COMM 367 — Intro. to Organizational Comm.
COMM 382 — Argumentation and Debate
COMM 383 — Small Group Communication
COMM 385 — Persuasive Communication
COMM 390 — Conflict & Communication
COMM 400 — Interviewing
COMM 405 — Communication Issue Management
COMM 411 — Advanced Public Presentations
COMM 467 — Organizational Communication
COMM 483 — Advanced Small Group Communication

Program Requirements Total 36

Components of Degree Requirement
General Education 36
Program Requirements 36
Minor 21-24
General Electives 24-27

Degree Requirements Total 120

Leadership Studies Option

General Education
COMM 499C — Senior Seminar in Communication 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements
COMM 110 — History of Communications Media 3
COMM 220 — Introduction to Communication Theory 3
COMM 367 — Intro. to Organizational Comm. 3
COMM 383 — Small Group Communication 3
COMM 390 — Conflict & Communication 3
COMM 400 — Interviewing 3
COMM 401 — Communication & Leadership 3
CMAP 382 — Principles of Public Relations 3
MNGT 301 — Principles of Management 3
Electives - select nine hours from the courses below: 9
COMM 309 — Public Presentations
COMM 350 — Communication, Culture, and Diversity
COMM 385 — Persuasive Communication
COMM 405 — Communication Issue Management
COMM 467 — Organizational Communication
COMM 483 — Advanced Small Group
CMEM 390 — Web Layout and Design
BIS 320 — Web Technologies and Information Architecture
BIS 321 — Business Communications

ENG 390 — Professional Writing
MSU 400 — The World of Work
Up to eight hours of electives can be from the following one-credit hour LEAD and Military Science courses:
LEAD 101 — Leadership I
LEAD 102 — Service to Society
LEAD 201 — Leadership II
LEAD 202 — Service to Society II
LEAD 301 — Leading Groups
LEAD 302 — Leadership in Organizations
LEAD 401 — Advanced Leadership
LEAD 402 — Advanced Leadership II
MS 101 — Introduction to Military Science
MS 101A — Leadership Laboratory
MS 102 — Introduction to Leadership
MS 102A — Leadership Laboratory
MS 201 — Self/Team Development
MS 201A — Leadership Laboratory
MS 202 — Individual/Team Military Tactics
MS 202A — Leadership Laboratory

Program Requirements Total 36

Components of Degree Requirement
General Education 36
Program Requirements 36
Minor 21-24
General Electives 24-27

Degree Requirements Total 120

Multimedia Journalism Option

General Education
COMM 499C — Senior Seminar in Communication 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements
COMM 110 — History of Communication Media 3
COMM 220 — Introduction to Communication Theory 3
CMAP 166 — Media Design & Layout 3
CMEM 101 — Elements of Production I 3
CMJN 201 — Newswriting & Reporting I 3
CMJN 250 — Multimedia Newsgathering 3
CMJN 301 — Advanced Multimedia News 3
CMJN 464 — Public Opinion and the News Media 3
CMJN 492 — Media Law & Ethics 3
CMJN 177, 277, 377, 477 — Journalism Practicum — At least one hour at three different levels 3
Electives - select two courses (six hours) from the following:
CMJN 204 — Copyreading & Editing 3
CMJN 358 — Sportswriting 3
CMJN 364 — Feature Writing 3
CMJN 465 — Editorial Writing 3
CMEM 390 — Multimedia Web Layout & Design I 3

Program Requirements Total 36
In addition to the above courses, all Journalism majors must complete an internship (with or without credit) to meet program requirements.

Assessment of the internship will be integrated into the Senior Seminar course. If students complete the internship for credit, those hours will count toward University electives. Students must provide evidence of successful completion of an internship prior to receiving full credit in the CMJN Senior Seminar course. Completion forms are available in the departmental internship application.

Components of Degree Requirement

General Education 36
Program Requirements 36
Minor 21-24
General Electives 24-27

Degree Requirements Total 120

Multimedia Production Option

General Education
COMM 499C — Senior Seminar in Communication 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements
COMM 110 — History of Communication Media 3
COMM 220 — Introduction to Communication Theory 3
CMAP 166 — Multimedia Design & Layout 3
CMEM 101 — Elements of Production I 3
CMEM 201 — Elements of Production II 3
CMEM 341 — Writing for the Electronic Media 3
CMEM 390 — Electronic Media Web Layout & Design I 3
CMEM 177, 277, 377, 477 — Electronic Media Practicum 3
— At least one hour at three different levels
CMJN 492 — Media Law & Ethics 3
Electives - select two courses (6 hours) from the following:
CMEM: 340, 350, 381, 383, 385, 420, 450, 451
CMJN: 201
Select one course (3 hours) from the following:
CMJN: 250, 464
CMSP: 100
COMM: 462, 482
THEA: 284

Program Requirements Total 36

Communication Studies Minor
COMM 220 — Introduction to Communication Theory 3
COMM 350 — Communication, Culture, & Diversity 3
COMM 401 — Communication and Leadership 3
Electives — Select four courses (12 hours) from the following:
CMSP 100 — Voice & Articulation
COMM 210 — Listening
COMM 230 — Interpersonal Communication
COMM 309 — Public Presentations
COMM 320 — Intro to Research Methods in Comm.

Advertising Minor
CMAP 166 — Desktop Publishing and Publications Techniques I 3
CMAP 383 — Principles of Advertising 3
CMAP 386 — Social & Interactive Media 3
CMAP 483 — Advertising 3
CMAP 486 — Advertising Campaigns & Media Buying 3
CMEM 390 — Web Layout and Design I 3
Elective - select one of the following courses: 3
CMEM 101 — Elements of Production I
COMM 447 — Internship

Total 21

Multimedia Journalism Minor
CMEM 101 — Elements of Production I 3
CMJN 201 — Newswriting and Reporting I 3
CMJN 250 — News Gathering 3
CMJN 301 — Advanced Multimedia News 3
CMJN 492 — Law and Ethics of the Press 3
CMAP 166 — Multimedia Design & Layout 3
Electives - select one course (three hours) from the following:
CMJN 358 — Sports Writing 3
CMJN 364 — Feature Writing 3
CMJN 465 — Editorial Writing

Total 21

Components of Degree Requirement

General Education 36
Program Requirements 36
Minor 21-24
General Electives 24-27

Degree Requirements Total 120
COMM 367 — Intro. to Organizational Comm.
COMM 382 — Argumentation & Debate
COMM 383 — Small Group Communication
COMM 385 — Persuasive Communication
COMM 390 — Conflict & Communication
COMM 400 — Interviewing
COMM 405 — Communication Issue Management
COMM 411 — Advanced Public Presentations
COMM 467 — Organizational Communication
COMM 483 — Advanced Small Group Communication
CMAP 382 — Principles of Public Relations
CMJN 464 — Public Opinion & News Media

Total 21

Multimedia Production Minor
CMEM 101 — Elements of Production I
CMEM 201 — Elements of Production II
CMEM 341 — Writing for the Electronic Media
CMEM 390 — Web Layout and Design I
COMM 110 — History of Communication Media
Electives — Select one course from the following:
CMEM 340 — Video Production and Direction
CMEM 350 — Audio Production and Direction

Select one course from the following:
CMEM 381 — Documentary Production
CMEM 383 — Animation Production
CMEM 385 — Narrative Video Production

Total 21

Public Relations Minor
CMAP 166 — Desktop Publishing and Publication Techniques I
CMAP 382 — Principles of Public Relations
CMAP 385 — Public Relations Techniques
CMAP 482 — Public Relations Campaigns
COMM 320 — Intro. to Research Methods in Communication
Electives — Select one course (three hours) from the following:
COMM 447 — Internship (three hours)
CMAP 277, 377, and 477 (one hour each) — Practicum
Select one course (three hours) from the following:
CMEM 101 — Elements of Production I
CMJN 201 — Newswriting and Reporting
CMJN 358 — Sportswriting
CMJN 364 — Feature Writing
CMJN 465 — Editorial Writing
CMJN 492 — Media Law & Ethics
CMAP 383 — Principles of Advertising
CMAP 386 — Social & Interactive Media
CMAP 483 — Advertising Design
CMEM 390 — Web Layout & Design
COMM 405 — Communication Issue Management
COMM 467 — Organizational Communication

Total 21

Program Competencies

Students will develop:
1. Knowledge of major periods in American and British literature as well as major works and authors in those literary periods.
2. Knowledge of the various genres (e.g., short story, drama, novel, poem, essay) and their historical development.
3. Ability to write and think critically, leading to a proficiency in various linguistic, rhetorical, and critical discourses.
4. Ability to locate and select electronic and print materials appropriate to scholarship in English studies.
5. Knowledge of various linguistic, rhetorical, and/or critical approaches to literary texts.
6. Knowledge of culturally diverse literature.

Additional Competency for Teaching Majors/Areas:
Knowledge of contemporary pedagogy in English studies.

Assessment Procedures
1. Exit examinations
2. Survey of graduates

Additional Assessments for Teaching Area of Concentration
1. PRAXIS II
2. Student teaching semester, including teaching portfolio
3. Survey of graduates

Bachelor of Arts

The English curriculum has a two-fold purpose. It seeks to make a contribution to the general education of all students by providing them with the study of writing so they can use their language as effectively and precisely as possible and by introducing them to the sympathetic understanding of literature so their personal lives will be enriched by literary art. The English degree prepares students for such vocations as teaching, publishing, business, and public relations as well as for further professional studies. Students seeking secondary certification should select the area of concentration.
Area of Concentration in English with Secondary (8-12) Certification

General Education

Refer to the General Education section for a complete listing of general education requirements for the University.

ENG 211 — Introduction to World Literature I (HUM1) 3
ENG 499C — Senior Seminar in English 3

General Education Total 36

Program Requirements

Literature Cornerstone

Complete the following course:
ENG 300 — Introduction to Literary Studies in English. 3

Complete the following four courses:
ENG 331 — British Literature to 1750 3
ENG 332 — British Literature since 1750 3
ENG 341 — American Literature to 1865 3
ENG 342 — American Literature since 1865 3

Linguistics I - select one course from the following: 3
ENG 305 — Introduction to Linguistics
ENG 315 — Structure of English
ENG 404 — Linguistics: Grammar

Linguistics II - select one course from the following: 3
ENG 393 — History of the English Language
ENG 394 — Language and Society
ENG 401 — Semantics
ENG 405 — Introduction to Old English

Writing I - select one course from the following: 3
ENG 390 — Professional Writing
ENG 391 — Advanced Expository Writing
CMJN 301 — Advanced Multimedia News
CMJN 465 — Editorial Writing

Writing II - select one course from the following: 3
ENG 395 — Poetry Writing
ENG 396 — Fiction Writing
ENG 397 — Writing Creative Nonfiction
ENG 483 — Advanced Poetry Writing
ENG 484 — Advanced Fiction Writing
ENG 485 — Advanced Nonfiction Writing
CMJN 358 — Sportswriting
CMJN 364 — Feature Writing

English Language Arts Pedagogy — Complete all courses below:
ENG 280 — Intro to Teaching English in Secondary Schools
ENG 381 — Teaching Literature in Secondary Schools
ENG 382 — Teaching Writing in Sec. School
ENG 400 — Studies in English for Teachers

Literature Electives

Cultural Diversity - select one course from the following: 3
ENG 311 — Global English Literature
ENG 320 — Women Writers and Feminist Perspectives
ENG 325 — Religious Literature of the World

ENG 348 — African-American Literature
ENG 360 — Appalachian Literature
ENG 365 — Literature of the South
ENG 398 — Gay and Lesbian Literature

Literary Period - select one literary period course from the following:
ENG 422 — Studies in American Literature to 1900
ENG 423 — Studies in American Literature, 1900-1965
ENG 424 — Studies in Contemporary American Literature
ENG 436 — The English Renaissance
ENG 441 — Restoration and Eighteenth Century British Literature
ENG 442 — Romantic Writers
ENG 443 — Victorian Writers
ENG 444 — Twentieth Century British Literature
ENG 445 — Seventeenth Century British Literature

Major Author - select one course from the following: 3
ENG 435 — Shakespeare
ENG 495 — Seminar: Major Writers

Genre - select one genre course from the following: 3
ENG 344 — The Short Story and the Novel
ENG 432 — The English Novel
ENG 435 — Shakespeare
ENG 453 — Modern Drama
ENG 455 — Early Dramatic Literature
ENG 463 — American Fiction
ENG 466 — American Poetry
ENG 470 — Introduction to Film Literature

Other Program Requirements (Professional Education)

EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories & Assessment in Ed 3
EDSE 312 — Educational Methods and Technology 3
EDSE 483 — Classroom Organ. & Mgt for Sec. Teachers 3
EDSP 230 — Education of Exceptional Children 3

Professional Semester
EDF 416 — Clinical Practice 12

Program Requirements Total 81

Supplemental Requirements

Foreign Language 3

Three semester hours in one foreign language above the first semester level, e.g., French, Spanish, German, Italian, Latin, Russian or ENG 405 - Introduction to Old English.

Components of Degree Requirement

General Education 36
Program Requirements 81
Supplemental Requirements 3

Degree Requirement Total 120
English Major

General Education

The following specific general education requirements must be completed:

ENG 499C — Senior Seminar in English 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements

Literature Cornerstone 3

ENG 300 — Introduction to Literary Studies in English 12
ENG 331 — British Literature to 1750
ENG 332 — British Literature since 1750
ENG 341 — American Literature to 1865
ENG 342 — American Literature since 1865

Linguistics - select one course from the following: 3

ENG 305 — Introduction to Linguistics
ENG 315 — Structure of English
ENG 393 — History of the English Language
ENG 394 — Language and Society
ENG 401 — Semantics
ENG 404 — Linguistics: Grammar
ENG 405 — Introduction to Old English

Writing I - select one course from the following: 3

ENG 390 — Professional Writing
ENG 391 — Advanced Expository Writing

Writing II - select one course from the following: 3

ENG 395 — Poetry Writing
ENG 396 — Fiction Writing
ENG 397 — Writing Creative Nonfiction
ENG 483 — Advanced Poetry Writing
ENG 484 — Advanced Fiction Writing
ENG 485 — Advanced Nonfiction Writing

Literature Electives 3

Cultural Diversity - select one course from the following: 3

ENG 311 — Global English Literature
ENG 320 — Women Writers and Feminist Perspectives
ENG 325 — Religious Literature of the World
ENG 348 — African-American Literature
ENG 360 — Appalachian Literature
ENG 365 — Literature of the South
ENG 398 — Gay and Lesbian Literature

Literary Period - select one course from the following: 3

ENG 422 — Studies in American Literature to 1900
ENG 423 — Studies in American Literature, 1900-1965
ENG 424 — Studies in Contemporary American Literature
ENG 436 — English Renaissance
ENG 441 — Restoration and 18th Century Literature
ENG 442 — Romantic Writers
ENG 443 — Victorian Writers
ENG 444 — 20th Century British Literature
ENG 445 — 17th Century British Literature

Major Author - select one course from the following: 3

ENG 435 — Shakespeare
ENG 495 — Seminar: Major Writers

Genre - select one course from the following: 3

ENG 344 — Short Story and the Novel
ENG 432 — English Novel
ENG 435 — Shakespeare
ENG 453 — Modern Drama
ENG 455 — Early Dramatic Literature
ENG 463 — American Fiction
ENG 466 — American Poetry
ENG 470 — Introduction to Film Literature

English Elective — select any 300-level or higher English course 3

Program Requirements Total 39

Supplemental Requirements

Foreign Language (ENG 405 or one course above 101 level in any foreign language) 3

Supplemental Requirements Total 3

Three semester hours in a foreign language above the first semester level, e.g., French, Spanish, German, Italian, Latin, Russian, or ENG 405 - Introduction to Old English 3

Components of Degree Requirement

General Education 36
Program Requirements 39
Supplemental Requirements 3
Minor 21
General Electives 21

Degree Requirement Total 120

English Minor

American Literature Surveys (select one) 3

ENG 341 — American Literature to 1865
ENG 342 — American Literature since 1865

British Literature Surveys 6

ENG 331 — British Literature to 1750
ENG 332 — British Literature since 1750

Linguistics (select one) 3

ENG 305 — Introduction to Linguistics
ENG 315 — Structure of English
ENG 393 — History of the English Language
ENG 394 — Language and Society
ENG 401 — Semantics
ENG 404 — Linguistics: Grammar
ENG 405 — Introduction to Old English

Writing (select one) 3

ENG 390 — Professional Writing
ENG 391 — Advanced Expository Writing
ENG 395 — Poetry Writing
ENG 396 — Fiction Writing
ENG 397 — Writing Creative Nonfiction
ENG 483 — Advanced Poetry Writing
ENG 484 — Advanced Fiction Writing
ENG 485 — Advanced Nonfiction Writing

**English Electives (select three)**  
200-400 level courses in English, six hours of which must be 300-400 level courses

**Total**  
The minor in English does not include the general education requirements in composition (six semester hours).

**Linguistics Minor**

The purpose of the minor in linguistics is (1) to contribute to students’ liberal education by allowing them to investigate the nature, acquisition, and function of human language, especially its history, structure, and role in society; and (2) to prepare them for careers in education, law, communications, foreign language, translation, journalism, technical writing, psychology, anthropology, and speech pathology.

**Linguistics Courses**

*Select five of the following:*
ENG 205 — Language: Culture and Mind
ENG 305 — Introduction to Linguistics
ENG 315 — Structure of English
ENG 393 — History of the English Language
ENG 394 — Language and Society
ENG 401 — Semantics
ENG 404 — Linguistics: Grammar
ENG 405 — Introduction to Old English

**Electives**

*Select any two courses from one or more of the following categories:*

**English**
Any 300-400 level course in ENG

**Foreign Language**
Any 300-400 level course in FRN, GER, ITL, LAT, SPA

**Formal Systems**
CIS 205 — Introduction to Programming—C++
CS/MATH 170 — Introduction to Computer Science
MATH 252 — Boolean Algebra
MATH 260 — FORTRAN Programming
MATH 300 — Introduction to Mathematical Proof
PHIL 306 — Introduction to Logic
PHIL 312 — Symbolic Logic

**Total**  
The minor in linguistics does not include the general education requirement in composition (six semester hours).

**Creative Writing Minor**

The minor in creative writing is designed for students who wish to develop their writing skills in a variety of genres.

**Writing courses**

*Select four courses from the following:*
ENG 391 — Advanced Expository Writing
ENG 395 — Poetry Writing
ENG 396 — Fiction Writing
ENG 397 — Writing Creative Nonfiction
ENG 483 — Advanced Poetry Writing
ENG 484 — Advanced Fiction Writing
ENG 485 — Advanced Nonfiction Writing
THEA 412 — Playwriting

**Literature Minor**

**American or British Literature**

*Select one of the following:*
ENG 331 — British Literature to 1750
ENG 332 — British Literature since 1750
ENG 341 — American Literature to 1865
ENG 342 — American Literature since 1865

ENG 435 — Shakespeare

**Literature and literary criticism**

*Select three electives from 300-400 level courses in literature*

**Philosophy**

*Select one of the following courses:*
PHIL 200 — Introduction to Philosophy
PHIL 308 — Philosophy of the Arts
PHIL 313 — American Philosophy
PHIL 355 — Ancient and Medieval Philosophy
PHIL 356 — Modern and Contemporary Philosophy
PHIL 389 — Honors Seminar in Philosophy
PHIL 410 — Current Philosophy

**History**

*Select one of the following courses:*
HIS 202 — American Studies
HIS 220 — Early American History
HIS 313 — Religion in American History
HIS 325 — History of the South
HIS 351 — England to 1688
HIS 352 — England since 1688
HIS 357 — The Renaissance and Reformation

**Total**  
The minor in literature does not include the general education requirements in composition (six hours).
Bachelor of Fine Arts Major in Creative Writing

Program Competencies
**In addition to the English competencies, students will develop:**
1. Theoretical understanding of elements of craft in multiple genres of creative writing.
2. Ability to write effectively in multiple genres of creative writing.
3. Theoretical understanding of methods of critical appraisal and revision of creative writing in multiple genres.
4. Ability to critically appraise and revise writing in multiple genres.
5. Knowledge of various genres (e.g., short story, drama, novel, poem, essay) and their historical development.
6. Ability to complete all tasks leading to the production of a literary journal.
   - Critical appraisal of submitted manuscripts
   - Journal layout and design
   - Formatting
   - Proofreading and editing
   - Distribution

Assessment Procedures
- Survey of graduates
- Annual assessment of original works of creative writing via a cumulative portfolio
- Yearly progress reports
- Assessment of senior thesis - all graduating BFA candidates are required to present a senior thesis in the form of a cumulative portfolio which contains a collection of the student's best writing. This portfolio will be discussed during a 30-minute defense in which the student will be required to discuss the work, its literary influences, ideas toward publication, process, etc.

Bachelor of Fine Arts
The English curriculum has a two-fold purpose. It seeks to make a contribution to the general education of all students by providing them with the study of writing so they can use their language as effectively and precisely as possible and by introducing them to the sympathetic understanding of literature so their personal lives will be enriched by literary art. The English degree prepares students for such vocations as teaching, publishing, business, and public relations as well as for further professional studies.

The BFA in Creative Writing diverges from the BA in English in its significantly greater concentration on the study of creative writing (requiring 18 hours in creative writing and a senior creative thesis).

BFA in Creative Writing

General Education Requirements
*Refer to the General Education section for a complete listing of general education requirements for the University.*

- CRW 499C — Senior Thesis 3

**General Education Total** 36

Program Requirements
*Complete the following:*
- ENG 395 — Poetry Writing 3
- ENG 396 — Fiction Writing 3
- ENG 397 — Writing Creative Nonfiction 3
*Select three courses from the following:*
- ENG 483 — Advanced Poetry Writing 3
- ENG 484 — Advanced Fiction Writing 3
- ENG 485 — Advanced Nonfiction Writing 3
- THEA 412 — Playwriting 3

**Literature Cornerstone**
- ENG 300 — Introduction to Literary Studies in English. 3

**Literature Surveys**
*Select three of the following:*
- ENG 331 — British Literature to 1750 3
- ENG 332 — British Literature since 1750 3
- ENG 341 — American Literature to 1865 3
- ENG 342 — American Literature since 1865 3

**Literature and Linguistics electives**
*Select three of the following, no more than one course from a specific area:*

- **Linguistics**
  - ENG 305 — Introduction to Linguistics
  - ENG 315 — Structure of English
  - ENG 393 — History of the English Language
  - ENG 394 — Language and Society
  - ENG 401 — Semantics
  - ENG 404 — Linguistics: Grammar
  - ENG 405 — Introduction to Old English

- **Cultural Diversity**
  - ENG 311 — Global English Literature
  - ENG 320 — Women Writers and Feminist Perspectives
  - ENG 325 — Religious Literature of the World
  - ENG 348 — African-American Literature
  - ENG 360 — Appalachian Literature
  - ENG 365 — Literature of the South
  - ENG 398 — Gay and Lesbian Literature

- **Literary Period**
  - ENG 422 — Studies in American Literature to 1900
  - ENG 423 — Studies in American Literature, 1900-1965
  - ENG 424 — Studies in Contemporary American Literature

- **Major Author**
  - ENG 435 — Shakespeare
  - ENG 495 — Seminar: Major Writers

- **Genre**
ENG 344 — The Short Story and the Novel
ENG 432 — The English Novel
ENG 435 — Shakespeare
ENG 453 — Modern Drama
ENG 455 — Early Dramatic Literature
ENG 463 — American Fiction
ENG 466 — American Poetry
ENG 470 — Introduction to Film Literature

Program Requirements Total 39

Supplemental Requirements
Foreign Language (ENG 405 or one course above 101 level in any foreign language) 3
CMAP 166 — Media Design and Layout 3
ENG 293 — Introduction to Creative Writing 3
Supplemental Requirements Total 9

Components of Degree Requirement
General Education 36
Program Requirements 39
Supplemental Requirements 9
Minor 21
General Electives 15
Degree Requirement Total 120

Department of History, Philosophy, Religion & Legal Studies

John Ernst, Chair
354 Rader Hall
606-783-2655

History

Faculty
K. DuRocher, J. Ernst (Chair), B. Fitzpatrick, J. Hennen, T. Kimmeyer, A. Mandzy, I. N’Daiye, S. Riegle, A. Scott

Program Competencies

Students are expected to possess:
1. A broad understanding of the events, circumstances, and chronology of world history.
2. The analytical ability and critical thinking skills to interpret historical events.
3. The ability to use methods of historical investigation, to conduct original research using primary sources, and to present findings in written and oral formats.
4. The ability to access and use electronic databases, information sites, and various online resources.

Assessment Procedures
History Achievement Test
Capstone course

Bachelor of Arts
The major and minor in history provide breadth in area coverage and depth in practicing history research. These characteristics of the program prepare students to enter the teaching profession, to enter an applied field such as heritage work, or to go on to graduate education.

General Education
HIS 499C — Senior Seminar in History 3

General Education Requirements 36
Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements (Major)
HIS 201 — Global Studies 3
HIS 202 — American Studies 3
HIS 210 — Early World Civilization 3
HIS 220 — Early American History 3
HIS 250 — Practicing History 3
HIS 300-329 — Advanced American History 3
HIS 350-369 — Advanced European History 3
HIS 370-379 — Advanced Non-Western History 3
HIS 399 — Selected Topics in History (Junior Seminar) 3
Advanced Electives in History (300 or higher) 6
Program Requirements Total 33

Minor
HIS 201 — Global Studies 3
HIS 202 — American Studies 3
HIS 210 — Early World Civilization, or
HIS 220 — Early American History 3
HIS 250 — Practicing History 3
HIS 300-329 — Advanced American History 3
HIS 350-369 — Advanced European History 3
HIS 370-379 — Advanced Non-Western History 3
Advanced Elective in History 3
Minimum for Minor 24

Supplemental Requirements
Foreign Language 3
1. History majors are required to take three hours of any foreign language.
2. All majors and minors are encouraged to seek significant international experiences through travel and opportunities on campus.

Additional Constraints:
Students are permitted to use only one course in the major or minor from each of the following pairs:
1. HIS 322 — Appalachia or HIS 323 — Kentucky
2. HIS 311 — Native American History, or
HIS 321 — The American Frontier

Components of Degree Requirement
General Education 36
Program Requirements 33
Supplemental Requirements 3
Minor 24
General Electives 24
Degree Requirement Total 120
Philosophy/Religious Studies

Faculty
C. Conroy, S. Davison, W. O’Brien, P. Ryan, J. Weir

Program Competencies

Students will develop:
1. An understanding of the significance of basic assumptions and presuppositions and skill at identifying and evaluating them.
2. An understanding of the major ideas of prominent philosophers — Eastern and Western, past and present — in the areas of epistemology, metaphysics, ethics, and aesthetics.
3. The ability and disposition to think critically and to understand, evaluate, and construct arguments in the context of cultural diversity.
4. An understanding and appreciation of diverse values and perspectives on life and the competence to begin to construct one’s own life philosophy.

Philosophy Major with Emphasis in Philosophy

General Education
PHIL 499C — Senior Seminar in Philosophy 3

General Education Total 36
Refer to the General Education section for a complete listing of general education requirements.

Program Requirements (Major)
PHIL 100 — Beginning Philosophy 3
PHIL 306 — Introduction to Logic 3
PHIL 355 — Ancient and Medieval Philosophy 3
PHIL 356 — Modern and Contemporary Philosophy 3

Core Requirements Total 12

Philosophy Option
PHIL 303 — Ethics, or
PHIL 403 — Ethical Theory
Choose one of the following:
PHIL 403 — Ethical Theory;
PHIL 420 — Metaphysics;
PHIL 430 — Epistemology; or
PHIL 400 — Philosophy of Science
Philosophy Electives from Group A 3

Philosophy Option Requirements Total 18

Components of Degree Requirement
General Education 36
Program Requirements 30
Minor 21
General Electives 33

Degree Requirements Total 120

Philosophy Major with Emphasis in Religious Studies

General Education
PHIL 499C — Senior Seminar in Philosophy 3

General Education Total 36
Refer to the General Education section for a complete listing of general education requirements.

Program Requirements (Major)
PHIL 100 — Beginning Philosophy 3
PHIL 306 — Introduction to Logic 3
PHIL 355 — Ancient and Medieval Philosophy 3
PHIL 356 — Modern and Contemporary Philosophy 3

Core Requirements Total 12

Religious Studies Option
REL 221 — World Religions I 3
REL 222 — World Religions II 3
PHIL 307 — Philosophy of Religion 3
Religious Studies Electives from Group B 9

Religious Studies Option Requirements Total 18

Components of Degree Requirement
General Education 36
Program Requirements 30
Minor 21
General Electives 33

Degree Requirements Total 120

Philosophy Area of Concentration with Emphasis in Philosophy

General Education
PHIL 499C — Senior Seminar in Philosophy 3

General Education Total 36
Refer to the General Education section for a complete listing of general education requirements.

Program Requirements (Area of Concentration)
PHIL 100 — Beginning Philosophy 3
PHIL 306 — Introduction to Logic 3
PHIL 355 — Ancient and Medieval Philosophy 3
PHIL 356 — Modern and Contemporary Philosophy 3

Program Core Requirements Total 12

Philosophy Option
PHIL 303 — Ethics, or
PHIL 403 — Ethical Theory
PHIL 403 — Ethical Theory,
PHIL 420 — Metaphysics,
PHIL 430 — Epistemology, or
PHIL 400 — Philosophy of Science
Philosophy electives from group A 30

Philosophy Option Requirements Total 36
Components of Degree Requirement

General Education 36
Program Requirements 48
General Electives 36
Degree Requirements Total 120

Philosophy Area of Concentration with Emphasis in Religious Studies

General Education
PHIL 499C — Senior Seminar in Philosophy 3
General Education Total 36

Refer to the General Education section for a complete listing of general education requirements.

Program Requirements (Area of Concentration)
PHIL 100 — Beginning Philosophy 3
PHIL 306 — Introduction to Logic 3
PHIL 355 — Ancient and Medieval Philosophy 3
PHIL 356 — Modern and Contemporary Philosophy 3
Program Core Requirement Total 12

Religious Studies Option
REL 221 — World Religions I 3
REL 222 — World Religions II 3
PHIL 307 — Philosophy of Religion 3
PHIL 320 — Eastern Philosophy 3
PHIL 321 — The Meaning of Life 3
Religious Studies Electives from group B 21
Religious Studies Option Requirement Total 36

Components of Degree Requirement

General Education 36
Program Requirements 48
General Electives 36
Degree Requirements Total 120

Philosophy Minor
PHIL 100 — Beginning Philosophy 3
PHIL 306 — Introduction to Logic 3
PHIL 355 — Ancient and Medieval Philosophy 3
PHIL 356 — Modern and Contemporary Philosophy 3
Philosophy electives from group A 9
Total Philosophy Minor Requirements 21

Religious Studies Minor
REL 221 — World Religions I 3
REL 222 — World Religions II 3
PHIL 306 — Introduction to Logic 3
PHIL 307 — Philosophy of Religion 3
Religious Studies Electives from group B 12
Total Religious Studies Minor Requirements 24

Group A: Philosophy Option Courses
PHIL 303 — Ethics
PHIL 307 — Philosophy of Religion
PHIL 308 — Philosophy of the Arts
PHIL 312 — Symbolic Logic
PHIL 313 — American Philosophy
PHIL 320 — Eastern Philosophy
PHIL 321 — The Meaning of Life
PHIL 333 — Environmental Ethics
PHIL 341 — Philosophy and Death
PHIL 351 — Philosophy of Love and Sex
PHIL 361 — Social & Political Philosophy
PHIL 389 — Honors Seminar in Philosophy
PHIL 399 — Special Courses
PHIL 400 — Philosophy of Science
PHIL 403 — Ethical Theory
PHIL 410 — Current Philosophy
PHIL 420 — Metaphysics
PHIL 430 — Epistemology
PHIL 476 — Special Problems*

Group B: Religious Studies Option Courses
ART 263 — World Arts
ART 264 — Art History II
ART 362 — Medieval Art
ART 363 — Renaissance Art
ART 467 — Native American Art
ENG 325 — Religious Literature of the World
ENG 367 — Old Testament Literature
ENG 368 — New Testament Literature
GEO 370 — Geography of World Religions
HIS 210 — Early World Civilizations
HIS 313 — Religion in American History
HIS 356 — Medieval Europe
HIS 357 — The Renaissance and Reformation
HIS 374 — The Middle East
HON 200 — Interdisciplinary Honors Core I: The Ancient World
HON 205 — Interdisciplinary Honors Core II: The Medieval World
HUM 203 — Introduction to Medieval Culture
PHIL 321 — The Meaning of Life
PHIL 341 — Philosophy and Death
PHIL 399 — Special Courses
PHIL 400 — Philosophy of Science
PHIL 476 — Special Problems*
REL 321 — Early and Medieval Christian Thought
REL 322 — Modern Christian Thought
REL 323 — 20th Century Christian Thought
REL 476 — Special Problems*

* No more than three hours of either PHIL 476 or REL 476 can count toward the fulfillment of the requirements for a major or a minor.

Legal Studies

Faculty
K. Collinsworth, D. Murphy

Legal Studies offers two programs for students interested in a pro-
fessional career in law as a paralegal, or who plan to pursue a law degree in law school, or students who plan to work in fields where some knowledge of law and legal procedure will be valuable, such as business, government, healthcare, banking, social work, etc. The Paralegal Studies major prepares students to enter the workforce as a professional paralegal upon graduation and is "approved" by the American Bar Association (ABA). Only about 25% of paralegal programs are approved by the ABA. Although students wishing to pursue law school can select from a variety of majors, many pursue a major in Paralegal Studies, or a minor in Legal Studies. Students who choose a major other than Paralegal Studies are strongly encouraged to consider the Legal Studies minor. The Legal Studies instructors are attorney-professors and the pre-law advisors for students interested in pursuing law school. They provide information about the law school admissions process, including the LSAT which is the law school entrance test, writing personal statements, and legal career opportunities for Paralegal Studies majors and Legal Studies minors.

Program Competencies

Students are expected to possess:
1. Knowledge of local, state, and national governments with particular emphasis on the American court system and its procedures. Understanding of the role of attorneys and paralegals in the delivery of legal services and how to comply with the applicable ethical rules and laws for paralegals and attorneys.
2. Knowledge of the basic principles of law and the skill to apply these principles in specialized substantive areas of law.
3. Knowledge and skills to conduct legal research of relevant primary and secondary resources using electronic databases, the Internet, and the print collection. The ability to recognize and value the varied nature of the human condition across individuals and culture groups through paralegal practice.
4. Knowledge and skills to function effectively within the context of the modern law office using up-to-date technologies to create legal forms, documents and exhibits, conduct legal research, and assist attorneys in the practice of law.
5. The skills to recognize and value the varied nature of the human condition across individuals and culture groups and to communicate effectively with people.
6. The skills to analyze, recognize, investigate, and coherently summarize legal issues and relevant facts.

Assessment Procedures

- Senior capstone project
- Internship evaluations
- Employment and graduate surveys

Paralegal Studies Major

Bachelor of Arts

The Paralegal Studies Degree is "Approved" by the American Bar Association

The paralegal profession continues to grow. Paralegals perform a variety of essential legal work under the supervision of licensed lawyers. Paralegals are highly valued members of the legal team. They may interview clients and witnesses, draft legal documents, research points of law, provide litigation support, assist with document review in pre-trial and formal discovery, assist at trials and mediations, research real estate titles, manage a law office, and represent clients before administrative agencies as allowed by law.

The BA in Paralegal Studies degree is designed to equip graduates with the appropriate applied and theoretical knowledge of law to successfully assist lawyers in providing legal services to clients.

The major combines the advantages of a liberal arts education with the development of professional skills necessary to provide legal assistance to attorneys in law offices, the courts, government agencies, corporations, including banks, hospitals, and other businesses.

Note: Paralegals are prohibited by law from engaging in the practice of law. Completion of this program or receipt of a BA in Paralegal Studies degree does not entitle one to practice law or render legal advice or services except as provided by law. See Kentucky Supreme Court Rule 3.700 and Kentucky Revised Statutes 524.130.

Paralegal Studies Major

Approved by the American Bar Association

General Education

PLS 499C — Senior Paralegal Practice Seminar 3

General Education Requirements 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements

- PLS 210 — Introduction to Law & Ethics
- PLS 321 — Legal Research & Writing I
- PLS 421 — Legal Research & Writing II
- PLS 325 — Pretrial Practice
- PLS 425 — Trial Practice
- PLS 332 — Property Law
- PLS 334 — Torts, Personal Injury Litigation and Insurance Law
- PLS 335 — Contracts and the Uniform Commercial Code
- PLS 340 — Criminal Law and Procedure
- PLS 490 — Paralegal Internship

Choose six (6) semester hours from the following approved electives. At least three semester hours must be from courses with a PLS prefix.

PLS 333 — Family Law
PLS 436 — Wills, Trusts, and Estates
PLS 337 — Corporate Law
PLS 360 — Paralegal Speciality Course
PLS 476 — Special Problems in Paralegal Studies
GOVT 321 — Constitutional Law: Govt Powers
GOVT 322 — Courts and Civil Liberties
GOVT 324 — Environmental Law and Policy

Program Requirements Total 36

Components of Degree Requirement

- General Education 36
- Program Requirements 36
- Minor 24
- General Electives 24
Legal Studies Minor

Faculty
K. Collinsworth, D. Murphy

The Legal Studies minor is available to all MSU students except students majoring in Paralegal Studies. The minor provides excellent preparation for students interested in attending law school, or who wish to increase their marketability in other career fields. The Legal Studies minor also provides students from a variety of majors the opportunity to study and share a common interest in the law. The minor is designed to provide a basic foundation of legal knowledge and skills. Students learn how to conduct legal research using electronic databases, the Internet, as well as the print collection of legal references of the library. Students are required to study the basic substantive law areas of torts, property and contract law, as well as civil and criminal law and procedure. In addition, students must complete six semester hours from a wide range of electives related to the law.

The Legal Studies faculty members are the pre-law advisors. They provide information and assistance for students who plan to attend law school.

Students who graduate with a minor in Legal Studies will have a good basic understanding of law and procedure; however, they will not be considered prepared to be employed as a paralegal, and may not practice law or render legal advice except as provided by applicable law. This program is not part of the ABA approval for the PLS program.

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 321 — Legal Research &amp; Writing I</td>
<td>3</td>
</tr>
<tr>
<td>PLS 325 — Pretrial Practice</td>
<td>3</td>
</tr>
<tr>
<td>PLS 332 — Property Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 334 — Torts, Personal Injury Litigation and Insurance Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 335 — Contracts and the Uniform Commercial Code</td>
<td>3</td>
</tr>
<tr>
<td>PLS 340 — Criminal Law and Procedure</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal                                         18

Plus six semester hours from the following list (at least one elective course must have a PLS prefix):

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 333 — Family Law</td>
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<tr>
<td>PLS 337 — Corporate Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 360 — Paralegal Specialty Course</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 303 — Comparative Constitutional Law &amp; Politics</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 322 — Courts and Civil Liberties</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 324 — Environmental Law and Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

Total for Minor                                       24

Social Studies

Faculty

Program Competencies

Students are expected to possess:

1. The capacity to teach at the secondary level in at least three social studies disciplines, including history.
2. Awareness of the social, political, and economic systems that comprise contemporary societies as well as the growing interdependencies between societies as mediated by a global economy and shared concern for the physical environment.
3. The ability to integrate and synthesize knowledge across disciplinary boundaries in order to accumulate realistic understanding of global, national, and local issues.
4. The ability to recognize and value the varied nature of the human condition across individuals and culture groups through the practice of social/historical analysis.
5. The ability to express methods of social science investigation, conduct original studies, and present findings of those investigations in written and oral format.
6. The ability to assess and use electronic databases, information sites, and various online resources, and to use various instructional and presentation programs.

Assessment Procedures

- National Teachers Examination (PRAXIS)
- Performance during professional semester
- Capstone Course

Bachelor of Arts

The Area of Concentration in Social Studies prepares students for teacher certification at the secondary level (grades 8 through 12) in at least four social studies teaching fields. There is no non-teaching program. This program aligns with trends in teacher certification that foster streamlining of certification requirements and procedures. A minimum of nine semester hours in a teaching field is required for certification in Kentucky. This program consists of 60 hours of credit in history and related social sciences. Students should work closely with an advisor to receive approval for the exact content of their program of study in this area of concentration.

Area of Concentration in Social Studies

General Education

**HIS 499D — Teaching Social Studies** 3

General Education Requirements 36

**Offered fall semesters only; must be completed prior to professional semester.**

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 201 — Global Studies</td>
<td>3</td>
</tr>
<tr>
<td>HIS 202 — American Studies</td>
<td>3</td>
</tr>
<tr>
<td>HIS 220 — Early American History</td>
<td>3</td>
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<tr>
<td>*HIS 250 — Practicing History</td>
<td>3</td>
</tr>
<tr>
<td>HIS 300 — 308 or HIS 322</td>
<td>3</td>
</tr>
<tr>
<td>HIS 310-319</td>
<td>3</td>
</tr>
<tr>
<td>HIS 350-359</td>
<td>3</td>
</tr>
<tr>
<td>HIS 370-379</td>
<td>3</td>
</tr>
</tbody>
</table>
The student must complete the three clusters listed.

Geography
GEO 101 — Dangerous Planet 3
GEO 201 — Map Interpretation and Analysis 3
GEO 300 — World Geography 3
Electives from GEO 6

Government
GOVT 141 — United States Government 3
GOVT 180 — Introduction to Political Theory or GOVT 242 — State and Local Government or GOVT 230 — Introduction to Comparative Politics 3
GOVT 300-349 3
GOVT 360-368 3

Economics
ECON 101 — Introduction to Economics 3
ECON 201 — Principles of Macroeconomics or ECON 202 — Principles of Microeconomics 3

**HIS 451 — Curriculum and Instruction for Social Studies 3

Program Requirements Total 54

**Offered fall semesters only; must be completed prior to professional semester.

*HIS 250 will satisfy the GOVT 289 prerequisite for advanced courses in government (applies to social studies students only).

Additional Constraints:
Students are permitted to use only one course in the major or minor from each of the following pairs:
1. HIS 322 — Appalachia or HIS 323 — Kentucky
2. HIS 311 — Native American History, or HIS 321 — The American Frontier

Supplemental Requirements (Professional Education)
EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDSP 230 — Education of Exceptional Children 3
EDF 311 — Learning Theories and Assessment 3
EDSE 312 — Educational Methods and Technology 3
EDSE 483 — Classroom Organization and Mngt. for Secondary Teachers 3
EDSE 416 — Clinical Practice 12

Professional Education Total 30

Components of Degree Requirement
General Education 36
Program Requirements 54
Supplemental Requirements 30
Degree Requirement Total 126

Department of International & Interdisciplinary Studies

Philip Krummrich, Chair
Honors House
606-783-2807

Appalachian Studies Minor

Faculty

Appalachian Studies Core:
APS 201 — Introduction to Appalachian Studies 3

Choose five of the following for a total of 15 credit hours:
ART 468 — Appalachian Arts 3
ENG 360 — Appalachian Literature 3
GEO 341 — Appalachia 3
HIS 322 — History of Appalachia 3
MUST 104 — Traditional Vocal Harmony 3
SOC 459 — Appalachian Culture 3
Total Core 18

Electives — two three-credit hour courses (may include courses not already selected above.)
AGR 319 — Herbs 3
BIOL 318 — Local Flora 3
BIOL 351 — Plant Natural History 3
BIOL 352 — Animal Natural History 3
ENG 394 — Language and Society 3
ENG 395 — Poetry 3
GEO 344 — Kentucky 3
GEO 345 — Environmental Geography 3
GOVT 344 — Kentucky Government 3
HS 491 — Creative Foods 3
MUSH 261 — Music Listening (folk element) 3
MUST 103 — Practical Theory for Traditional Music 3
RAPP 201 — Society, Nature, and Development 3
RAPP 202 — Basic Computer Tech in Regional Analysis 3
Total 24

Canadian Studies Minor

Canadian Studies Emphasis

Required Courses 13
FRN 101 — Beginning French I 3
FRN 102 — Beginning French II 3
IST 101 — Introduction to International Studies 3
IST 301 — Study Abroad-Internship 1
IST 401 — Senior Seminar 3

Note: Canadian-related studies may include IST 301 for a two-week period of study in Canada and IST 401 for a Canada-related seminar subject in comparative and international perspective.
Canadian Studies Required Courses 3
IST 330 — Perspectives on Canada 3

Canadian Studies Electives 6
IST 231 — Geography of the United States and Canada
IST 329 — North American Politics: United States and Canada
IST 331 — History of Canada
IST 332 — First Nations of Canada
IST 333 — Government and Politics of Britain and Canada
IST 334 — Comparative Constitutional Law and Politics
IST 335 — Political Economy and Environmental Policy in Canada
IST 336 — Politics of the North American Auto Industry
IST 339 — Selected Topics in Canadian Studies
Study in Canada elective 3
IST 430 — Canadian Parliament Internship Program
Total 22

Chinese, German, Italian, Latin

Faculty
J. Secor

For questions, call the department chair, Dr. Philip Krummrich: 606-783-2726, p.krummrich@moreheadstate.edu.

No academic programs in these languages are available. Refer to the course description section for course offerings.

Film Studies Minor

Core Courses 12
FLM 170 — Introduction to Film 3
FLM 270 — Film History 3
FLM 470 — Film Theory 3
CMEM 385 — Narrative Film Production* 3

Global Cinema 3
FRN 404 — Seminar in French Literature* or
SPA 309 — Explorations in Hispanic Film Analysis*

Note: A second international cinema course may count as an elective.

Electives 6
CMEM 381 — Documentary Production*
CMEM 383 — Animation Production
CMEM 420 — Screenwriting*
ENG 470 — Introduction to Film Literature
FLM 399 — Special Topics (may be taken more than once for credit if topic varies)
THEA 284 — Acting Techniques

Total 21

Note: No prerequisite is required for CMEM 385, FRN 404, SPA 309, CMEM 381, and CMEM 420 if taken as part of the Film Studies Minor.

The Film Studies Minor is an interdisciplinary program of study designed to give students a theoretical as well as practical knowledge of film. It recognizes the importance of film literacy in the digital age and offers students the critical skills they will need to productively engage with the mass-mediated world of the 21st century.

For questions, contact the department chair, Dr. Philip Krummrich at 606-783-2726 or via e-mail at p.krummrich@moreheadstate.edu.

French

Faculty
J. Secor, K. Taylor

Program Competencies

Students completing the French major will be expected to have the following competencies:
1. Proficiency in the four language skills: listening, speaking, reading, and writing.
2. Familiarity with the culture and civilization of France and other Francophone countries.
3. Familiarity with the most significant works of French literature.

Additional competencies for Teacher Education Students:
Students who are seeking additional certification for teaching are expected to possess those competencies determined by the TEP.

Assessment Procedures

Listening and reading exams will be given at the intermediate level. An exit exam testing the four skills will be administered at the advanced level.

The French curriculum at MSU teaches the language, literature, cinema, and civilization of France in depth, and introduces the culture of the Francophone world. Through the study of French, students will develop an awareness of areas of thought and action different from their own.

A French major or minor can lead to employment opportunities in teaching, business, translating, and interpreting, as well as postgraduate study in law, diplomacy, and the humanities.

First-hand knowledge of the target culture is vital to high achievement in the French major. Through its membership in the Kentucky Institute for International Studies, MSU provides students access to several overseas study programs. Credits earned in KIIS automatically transfer to the MSU degree.

Note: French 202 or the equivalent is a prerequisite to all courses numbered 300 or above.

Bachelor of Arts

General Education

General Education Total 36
Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements
FRN 101 — Beginning French I 3
FRN 102 — Beginning French II  3
FRN 201 — Intermediate French  3
FRN 202 — Conversation and Composition  3
FRN 301 — Advanced Grammar and Composition  3
FRN 302 — Advanced Phonetics and Conversation  3
FRN 303 — Survey of French Literature I  3
FRN 304 — Survey of French Literature II  3
Electives above FRN 202  6

**Program Requirements Total**  30

*Students with prior study of French should take the online placement test before enrolling for classes. Those who begin in a more advanced class will have the opportunity to earn credit by examination for the classes they do not need to take. Please consult the department for details.

### Components of Degree Requirement

- **General Education**
  - 36

- **Program Requirements**
  - 30

- **Minor**
  - 21

- **Free Electives**
  - 33

**Degree Requirement Total**  120

### French Education

**General Education**

- **General Education Total**  36

Refer to the General Education section for a complete listing of general education requirements for the University.

**Program Requirements**

*FRN 101 — Beginning French I  3
FRN 102 — Beginning French II  3
FRN 201 — Intermediate French  3
FRN 202 — Conversation and Composition  3
FRN 301 — Advanced Grammar and Composition  3
FRN 302 — Advanced Phonetics and Conversation  3
FRN 303 — Survey of French Literature I  3
FRN 304 — Survey of French Literature II  3
Electives above FRN 202  6
FRN 405 — Linguistics and Language Teaching  6

**Program Requirements Total**  36

*Students will need to take another general education course to fill the HUM requirement.

### Teaching (P-12)

All majors must take the capstone course, FRN 499C — Senior Colloquium in French, in addition to the 36 hours specified above.

### Requirements for P-12 Certification

**Supplemental Requirements (Professional Education)**

- EDF 207 — Foundations of Education  3
- EDF 211 — Human Growth and Development  3
- EDF 311 — Learning Theories and Assessment  3
- EDSE 312 — Educational Methods and Technology  3
- EDSE 483 — Classroom Organ & Mgt for Sec Tchrs  3
- EDSP 230 — Education of Exceptional Children  3

### Professional Semester

- EDSE 416 — Clinical Practice  12

**Professional Education Total**  30

Students admitted to the teacher education program will be required to demonstrate computer expertise prior to graduation. They may demonstrate computer expertise by completing at least one of the following:

1. CIS 101 — Computers for Learning or EDUC 222 — Computing Tools for Educators
2. CLEP education (available in the University Testing Center)
3. A computer workshop taken for college credit

*Students with prior study of French should take the online placement test before enrolling for classes. Those who begin in a more advanced class will have the opportunity to earn credit by examination for the classes they do not need to take. Please consult the department for details.

**Components of Degree Requirement**

- **General Education**
  - 36

- **Program Requirements**
  - 36

- **Supplemental Requirements**
  - 30

- **Minor**
  - 21

**Degree Requirement Total**  123

**French Minor**

- **Minor**
  - FRN 101 — Beginning French I  3
  - FRN 102 — Beginning French II  3
  - FRN 201 — Intermediate French  3
  - FRN 202 — Conversation and Composition  3
  - FRN 301 — Advanced Grammar and Composition  3
  - *Electives above FRN 202  6

**Total**  21

### George M. Luckey Academic Honors Program

Dr. Philip Krummrich, Director

To complete the Academic Honors Program, students must complete the following courses:

- HON 100 — Introduction to Honors  1
- HON 200 — Interdisciplinary Honors Core I: The Ancient World  3
- HON 205 — Interdisciplinary Honors Core II: The Medieval World  3
- HON 210 — Interdisciplinary Honors Core III: The Renaissance World  3
- HON 215 — Interdisciplinary Honors Core IV: The Modern World  3
- HON 299 — Self-Education (to be taken twice)  1
- HON 300 — Honors-enhanced Study (to be taken twice)  1
- HON 490 — Senior Honors Project (maximum of six)  1
HON 200, 205, 210 and 215 will fulfill requirements in general
education. HON 200 has been approved as an alternative to
the second required writing class (ENG 200) in the core. HON 205
will satisfy HUM1. HON 210 will satisfy SBS2. HON 215 will satis-
fy NSC2.

Students will be required to:
1. Seek Undergraduate Research Fellowships, and to keep records
   of involvement in research, presentations, and publications;
2. Complete 80 hours of approved service activities during their
   four years in the program, and to keep records of their activities;
3. Develop the ability to learn independently through three re-
   quired experiences - Self-education, Honors-enhanced Study,
   and the Senior Honors Project; and
4. Be exposed to the world beyond our national borders through
   the required overseas experience.

Interdisciplinary International Studies

Faculty
R. Berglee, V. Craig, J. Holcomb, G. O'Dell

Program Competencies

For the successful completion of the IIS major, students
will learn to:
1. Interact with people who are culturally diverse;
2. Gain knowledge of other cultures, languages and institutions;
3. Understand how the historical and cultural backgrounds
   shape current events;
4. Develop interdisciplinary analytical skills; and
5. Assess current political and economic changes.

Assessment Procedures
1. Study Abroad
2. Exit proficiency exams
3. Capstone
4. Surveys of graduating seniors

Bachelor of Arts

General Education Requirements 36

Refer to the General Education section for a complete listing of
general education requirements for the University.

Program Core Requirements

IST 101 — Introduction to International Studies 3
IST 399 — Selected Studies in International Studies 3
IST 499C — Senior Seminar 3
*Choose three:
ECON 201 — Principles of Economics 9
GEO 300 — World Geography
GOVT 230 — Comparative Politics
HIS 201 — Global Studies

Total Program Core Requirements 18

Region of Expertise
Choose one region.

Option 1 — Eurasian Region
Choose four, with a maximum of two per discipline:
CHI 300 — Chinese Literature & Society
PHIL 320 — Eastern Philosophy
GEO 383 — Asia
GOVT 337 — Politics of Asia
GOVT 334 — Russia and Eastern European Governments
HIS 372 — Modern China
HIS 373 — Japanese Civilization
HIS 377 — Twentieth Century Asian Wars
HIS 354 — Russia since 1917

Option 2 — Latin American Region
Choose four, with a maximum of 2 per discipline:
ART 464 — Spanish, Portuguese, & Latin American Art
GEO 320 — Latin America
GEO 326 — Cuba and the Caribbean
GOVT 332 — Politics of Latin America & the Caribbean
HIS 379 — Latin American History
SPA 306 — Latin American Culture & Civilization

Option 3 — European Region
Choose four, with a maximum of 2 per discipline:
ART 481 — German Art of the 20th Century
FRN 203 — Introduction to France
FRN 205 — French Culture & Civilization
GEO 331 — Europe
GOVT 330 — Parliamentary Democracies
HIS 359 — 19th Century Europe
HIS 361 — 20th Century Europe
HIS 355 — Modern Germany
HIS 354 — Russia since 1917
SPA 304 — Spanish Culture & Civilization

Option 4 — Africa and the Middle East Region
Choose four, with a maximum of 2 per discipline:
GEO 328 — Africa
GEO 385 — The Middle East
GOVT 331 — Politics of the Middle East and North Africa
HIS 370 — African History
HIS 374 — The Middle East
IST 312 — Culture of Islamic Africa

Option 5 — Global Issues
Choose four, with a maximum of 2 per discipline:
AGR 204 — World Food
ART 482 — Contemporary World Art
CRIM 316 — Global Crime & Terrorism
ENG 211 — Introduction to World Literature I
ENG 325 — Religious Literature of the World
GEO 311 — Geography of the Global Economy
GOVT 362 — Current World Problems
GOVT 364 — International Relations
HIS 317 — US Foreign Relations
NURS 345 — Global Health
*For those students who choose to pursue a minor in ECON,
GEO, GOVT, or HIS and that discipline class is required for their minor, then they will need to take the other three core classes to fulfill their IST major requirements.

**Supplemental Requirements**

An Overseas Experience: *This must be approved by the chair of the department and is a prerequisite for capstone. To help students with this requirement, financial scholarships will be made available.*

Foreign Language Requirement (six credits must be in the same language)

**Supplemental Requirements Total** 9

**Components of Degree Requirement**

General Education 36

Program Requirements 39

Minor 21

Free Electives 24

**Degree Requirement Total** 120

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**Interdisciplinary International Studies Minor**

Adrian Mandzy, Coordinator

317 Rader Hall

606-783-9369

The purpose of the International Studies (IST) minor is to provide students with an understanding of the complex relationships that exist in the world today between nation-states and non-governmental organizations. The IST minor will allow students to investigate international issues through an interdisciplinary approach in which they will combine theory with practice.

Students may select courses that will provide them with a concentration in a specific nation (i.e., German, Canadian, or Chinese studies) or in a region/continent (i.e., Southeast Asian, South American, or sub-Saharan Africa). Students may also choose a general approach to international studies. The intention is to equip students to live and work in a world with understanding and respect of other peoples.

**Program Competencies**

**Upon completion of this program, the students will:**

1. Demonstrate elementary competence in at least one modern language beyond their native tongue.
2. Develop an international context that will develop their personal and professional lives.
3. Develop appreciation for the culture and civilization of other countries.
4. Explain the implications of international issues to their major and/or profession.
5. Navigate successfully in a foreign country.

The senior seminar class will provide the opportunity to analyze and synthesize material from the program.

The IST minor requires 22 hours. These hours are distributed in the following way:

**Required Courses**

IST 101 — Introduction to International Studies 3

IST 301 — International Studies Study Abroad 1

IST 401 — Seminar in International Studies 3

**Electives**

Additional courses equated in International Studies 9

*Courses currently approved to be equated in the minor include:*

IST/HIS 201 — Global Studies

IST/AGR 204 — World Food

IST/FRN 205 — French Culture and Civilization

IST 206/FRN 206 — Business French

IST/ENG 211 — Introduction to World Literature I

IST/ENG 212 — Introduction to World Literature II

IST/REL 221 — World Religions I

IST/REL 222 — World Religions II

GEO 241 — United States and Canada

IST/ART 263 — Art History I

IST/ART 264 — Art History II

IST/ART 265 — Art History III

IST/GEO 300 — World Geography

IST 302/GOVT 331 — Politics of the Middle East and North Africa

IST 303/GOVT 332 — Politics of Latin America and the Caribbean

IST 304/GOVT 333 — Politics of Sub-Saharan Africa

IST/SOC 305 — Cultural Anthropology

IST 306/GOVT 364 — International Relations

IST 307/GOVT 367 — Politics of Intern Econ Relations

IST/GEO 310 — Australia

IST/GEO 311 — Geography of the Global Economy

IST 321/PHIL 320 — Eastern Philosophy

IST 324/GEO 370 — Geography of World Religions

IST/ENG 325 — Religious Literature of the World

IST/GEO 328 — Africa

IST/GOVT 329 — North Amer Politics: US & Canada

IST 330 — Perspectives on Canada

IST 331/HIS 336 — History of Canada

IST 332 — First Nations of Canada

IST 333 — Govt & Politics of Britain and Canada

IST 334/GOVT 303 — Comp Const Law & Politics

IST 335 — Political Econ & Envir Policy in Canada

IST 336 — Politics of the American Auto Industry

IST/GOVT 337 — Politics of Asia

IST 338/GOVT 334 — Russia and East European Govt

IST 340/SPAN 304 — Spanish Culture and Civilization

IST 341/SPAN 306 — Latin American Cult & Civil

IST/NAHS 345 — Global Health

IST/COMM 350 — Comm, Culture, & Diversity

IST/HIS 351 — England to 1688

IST/HIS 352 — England since 1688

IST/HIS 353 — Russia to 1917

IST/HIS 354 — Russia since 1917

IST/HIS 355 — Modern Germany

IST/HIS 358 — Revolutionary Europe

IST/HIS 359 — 19th Century Europe

IST/GOVT 360 — United Nations and World Organizations
tium, the University is able to send faculty and students to Eng-

ent loans or grants for which they would normally be eligible.
gram that awards academic credit, the student may apply for stu-
successful completion of the program. For any study abroad pro-

World. The majority of these programs grant academic credit upon

Denmark, Ecuador, Germany, Japan, Mexico, Thailand, Myanmar

countries in-

whom they are enrolled.

U.S. students take courses offered in English. Countries in-

Travel to study centers around the world, including France, Aus-

include in the Magellan Exchange are Germany, France, Belgium,
The Netherlands, Finland, Spain, and Austria. Opportunities to

Additional information about any study abroad opportunity may

be obtained by accessing the international education Web page

(www.moreheadstate.edu/oie).

Interdisciplinary Women's Studies Minor

Ann Andaloro, Director
303F Breckinridge Hall
606-783-2714

The newest consortium to which Morehead State University be-

cluded in the Magellan Exchange are Germany, France, Belgium,
The Netherlands, Finland, Spain, and Austria. Opportunities to

have internships while attending classes are also available.

The purpose of the Women's Studies Minor is to provide students

with an understanding of how gender, particularly in terms of

women, is constructed and employed in educational, historical,
aesthetic, sociological, and political contexts. The intention is to

equip students with the knowledge and analytical abilities needed
to recognize and transform gender inequality in their own lives
and in the world at large.

Program Competencies

The purpose of the program is:

1. To inform students of the diversity of women's contributions
   across academic disciplines in a multicultural and global soci-
   ety.
2. To increase students' knowledge of the varied contributions
   of women throughout history.
3. To challenge students to use a variety of critical thinking and
   problem solving skills to recognize and contend with gender
   inequality at the individual and social level.
4. To expand students' knowledge, skills, and consciousness re-
   garding their choices in families, politics, work, and leisure.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WST 273</td>
<td>Introduction to Women's Studies</td>
<td>3</td>
</tr>
<tr>
<td>WST 490</td>
<td>Integrative Capstone in Women's Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Additional courses equated in Women’s Studies 15

Some courses currently approved to be equated in the minor are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WST 120/ENG 120</td>
<td>Approaches to Literature</td>
</tr>
<tr>
<td>WST 210/GOVT 180</td>
<td>Introduction to Political Theory</td>
</tr>
<tr>
<td>WST/SWK 230</td>
<td>Social Welfare, History, and Ethics</td>
</tr>
<tr>
<td>WST 302/CRIM 300</td>
<td>Criminogenic Family</td>
</tr>
<tr>
<td>WST 303/SWK 301</td>
<td>Comparative Family Violence</td>
</tr>
<tr>
<td>WST/SOC 305</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>WST/HIS 312</td>
<td>Women in American History</td>
</tr>
<tr>
<td>WST/GOVT 317</td>
<td>Feminist Political Thought</td>
</tr>
<tr>
<td>WST/ENG 320</td>
<td>Women Writers and Feminist Perspectives</td>
</tr>
<tr>
<td>WST/EDF 322</td>
<td>Gender and Education</td>
</tr>
<tr>
<td>WST/SOC 333</td>
<td>Sociology of Gender Violence</td>
</tr>
<tr>
<td>WST/SOC 335</td>
<td>The Family</td>
</tr>
<tr>
<td>WST/SWK 340</td>
<td>Community Mental Health</td>
</tr>
<tr>
<td>WST/SOC 350</td>
<td>Human Experience of Sex and Gender</td>
</tr>
<tr>
<td>WST/PHIL 351</td>
<td>Philosophy of Love and Sex</td>
</tr>
<tr>
<td>WST/SOC 354</td>
<td>The Individual and Society</td>
</tr>
<tr>
<td>WST/GOVT 355</td>
<td>Women and Politics</td>
</tr>
</tbody>
</table>
Spanish

Faculty
B. Boisvert, V. Cano, E. Hastings, P. Krummrich, J. Secor, I. Zavala-Garrett

Program Competencies

Students will demonstrate:
1. Proficiency in the four skills (listening, reading, speaking, and writing).
2. A firm command of Spanish grammatical structures.
3. Familiarity with significant aspects of the culture and civilization of the Hispanic world.
4. Familiarity with the most important works and trends of Spanish and Spanish American literature and, especially, an ability to analyze Hispanic literary passages.

It is strongly recommended that Spanish be started in the freshman year and that the courses be taken without interruption.

Additional Competencies for Teacher Education students
Students seeking certification in Spanish are expected to possess those competencies determined by the TEP.

Assessment Procedures

Exit proficiency exams

The Spanish curriculum at MSU teaches the language and the literature of the Hispanic world, whereby students will perceive areas of thought and action different from their own. More specifically, it surveys Hispanic civilization through its history, geography, and fine arts, as well as political and social institutions. For students interested in international business, the curriculum offers the opportunity to acquire proficiency in Spanish for business and commerce.

Students may receive full credit at MSU for courses taken in summer, semester, and year study abroad programs, including those administered by the Kentucky Institute of International Studies (KIIS). Summer study opportunities are offered in Argentina, Costa Rica, Ecuador, Mexico and Spain. Two semester programs are also available: one for the fall semester in Morelia, Mexico, and one for the spring semester in Segovia, Spain. Participation is strongly encouraged.

The Spanish program prepares students to enter areas of teaching, interpretation, and translation. Further, the study of Spanish aids students seeking employment in areas where knowledge of a second language is beneficial — business and commerce, tourism, social services, and the like.

Note: SPA 300 — Grammar and Composition, is a prerequisite for all other 300 and above numbered courses except SPA 305 — Conversation.

Bachelor of Arts

General Education Requirements 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements

*SPA 101 — Spanish Language and Culture I 3
SPA 102 — Spanish Language and Culture II 3
SPA 201 — Intermediate Spanish I 3
SPA 202 — Intermediate Spanish II 3
SPA 208 — Spanish Phonetics and Pronunciation 3
SPA 300 — Grammar and Composition 3
Hispanic Literature Electives 6
Approved 300-400 level electives 6
Program Requirements Total 30

*Students will need to take another general education course to fulfill the HUM requirement.

Components of Degree Requirement

General Education 36
Program Requirements 30
Minor 21
Free Electives 33
Degree Requirement Total 120

Spanish Education

Bachelor of Arts

General Education Requirements 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements (Major)

*SPA 101 — Spanish Language and Culture I 3
SPA 102 — Spanish Language and Culture II 3
SPA 201 — Intermediate Spanish I 3
SPA 202 — Intermediate Spanish II 3
SPA 208 — Spanish Phonetics and Pronunciation 3
SPA 300 — Grammar and Composition 3
Hispanic/SPA Literature Electives 6
Approved SPA 300-400 level electives 6
SPA 405 — Linguistics and Language Teaching 6
Program Requirements Total 36

*Students will need to take another general education course for the HUM requirement.
that Spanish be started in the freshman year and be taken without
Krummrich at 606-783-2726 or via e-mail at
placement on the basis of the score.
university must take a
and to the department. We will rec-
the department chair, Dr. Philip
It is strongly recommended that Spanish be started in the freshman year and be taken without interruption.
*Those who begin in a more advanced class will have the opportunity to earn credit by examination for the classes they do not need to take. Please consult the department for details.

Supplemental Requirements (Professional Education)
EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment 3
EDSE 312 — Educational Methods and Technology 3
EDSE 483 — Classroom Organ & Mgt for Sec Tchrs 3
EDSP 230 — Education of Exceptional Children 3

Professional Semester
EDSE 416 — Clinical Practice 12

Professional Education Total 30

Components of Degree Requirement
General Education 36
Program Requirements 36
Supplemental Requirements 30
Minor 21

Degree Requirement Total 123

Spanish Minor
Basic Language 15
SPA 101 — Spanish Language and Culture I
SPA 102 — Spanish Language and Culture II
SPA 201 — Intermediate Spanish I
SPA 202 — Intermediate Spanish II
SPA 208 — Spanish Phonetics and Pronunciation

Advanced Language 3
SPA 300 — Grammar and Composition

Approved 300-400 level electives 3

Total 21

Students enrolling at Morehead State University must take a Placement Examination in Spanish if they have studied the language previously and intend to continue their Spanish studies at MSU. The placement test is available at any time on the Web and takes no more than 30 minutes to complete; the score is sent automatically to the student and to the department. We will recommend placement on the basis of the score.

For questions, contact the department chair, Dr. Philip Krummrich at 606-783-2726 or via e-mail at p.krummrich@moreheadstate.edu. It is strongly recommended that Spanish be started in the freshman year and be taken without interruption.

*Those who begin in a more advanced class will have the opportunity to earn credit by examination for the classes they do not need to take. Please consult the department for details.

Army ROTC
The Department of Military Science is a Senior Reserve Officer Training Corps (ROTC) Instructor Group staffed by Army personnel. The department provides a curriculum that qualifies the college graduate for a commission as an officer in the U.S. Army, U.S. Army Reserve or the Army National Guard. Army ROTC is traditionally a four-year program consisting of basic (100 and 200-level) and advanced (300 and 400-level) courses. However, a two-year program is offered that enables juniors, community college students and others who missed ROTC during their first two years at MSU to qualify for a commission.

Military Science courses award elective academic credit and there is no obligation to serve in the military for taking the courses. Army ROTC instruction increases the opportunities for college students by expanding their experiences while in college, and by giving them options and potential for either a civilian or military career. Enrollment is initially open to all students.

Scholarships and Financial Assistance
Two-, three-, and four-year scholarships are available. The scholarships pay full tuition and fees, and includes a payment for books or supplies. Additional benefits may be available. Information on Army ROTC and ROTC scholarships may be obtained from the Military Science Department, Morehead State University, 306 Button Auditorium, or by calling 606-783-5225.

Financial Assistance: All contracted cadets are paid a subsistence allowance (stipend) each month based on college standing for up to 10 months per year. Students enlisted in the USAR or ARNG may serve in the Simultaneous Membership Program (SMP) and receive additional benefits, including tuition assistance and enhanced drill pay.

Army Reserve Officer Training Corps Uniform, Books, and Supplies: Students enrolling in the Army ROTC program are issued U.S. Army uniforms, most ROTC required books and supplies by the Military Science Department. Uniforms and equipment must be returned before commissioning or upon disenrollment from the Reserve Officers Training Corps program.

Program Information
Students interested in becoming an Army officer can participate in the ROTC program in order to meet the commissioning requirements. Students working to obtain a commission must be medically qualified, meet all pre-commissioning requirements (established by the Department of the Army), complete a program of study for a degree (bachelor’s degree or higher), complete all General Education requirements and complete three (3) hours of a military history-related course from the selection below (or approved by the department chair); while maintaining at least a 2.0 GPA (2.5 for scholarship students). Those students completing the program will receive a commission as a Second Lieutenant in the U.S. Army, U.S. Army Reserves (USAR), or the Army National Guard (ARNG).

Four-Year Program
The four-year program is divided into two phases, the basic course and the advanced course.

The basic course (MS 100 and 200) is open to all students and begins the leadership development process. It is designed to acquaint students with the Army, introduce fundamental individual
skills, introduce time management skills and teach students to develop their own capabilities. There is no military service obligation for students to participate in basic course classes.

The advanced course (MS 300 and 400) accepts students of high moral character who meet required medical, aptitude, and GPA requirements. The Military Science Advanced Course is normally taken during the junior/senior or graduate years. Students learn land navigation, communications, small unit tactics, patrolling, military management, staff operations, logistics, army administration, military law, ethics, and the Army system and culture. Students must meet eligibility requirements and sign a contract for commissioning with the U.S. Army. The general objective of these courses is to produce junior officers who will be the future officer leadership of the U.S. Army, U.S. Army Reserve, or the Army National Guard. Contracted Advanced Course students are required to attend the Leadership Development and Assessment Course (LDAC), normally between their junior and senior academic years. This course is mandatory for all students seeking a commission in the U.S. Army but registration for university credit is optional. Students attending this camp are paid and given travel allowance from their home to camp and back.

Two-Year Program

The two-year program is designed for transfer students and MSU students who wish to earn a commission as an Army officer, but did not participate in the four-year program. Students desiring to participate in the two-year program must first gain credit for basic military science courses. Qualified veterans, USAR and ARNG personnel may receive basic course credit for their prior service. College freshmen and sophomores, or other students with at least two years remaining in college, may gain credit for basic military science courses by completing a four-week ROTC leadership practicum at Fort Knox, Ky., conducted during the summer. Once the student receives basic course credit, he/she enrolls in the advanced course (see advanced course, above, in Four-Year Program) to complete the requirements of the program.

Military Science Minor

*Six to eight credit hours from the following MS courses denoted by an asterisk (*). All other MS courses are required. Enrolled students may pursue a minor in military science by completing the following courses:

*MS 101 — Introduction to Military Science, and 3
*MS 101A — Leadership Laboratory 3
*MS 102 — Introduction to Leadership; and 3
*MS 102A — Leadership Laboratory 3
*MS 201 — Self/Team Development; and 3
*MS 201A — Leadership Laboratory 3
*MS 202 — Individual/Team Military Tactics; and 3
*MS 202A — Leadership Laboratory 3
*MS 301 — Leading Small Organizations I; and 3
MS 301A — Advanced Leadership Laboratory 3
MS 302 — Leading Small Organizations II; and 3
MS 302A — Advanced Leadership Laboratory 3
MS 401 — Leadership Challenges and Goal Setting; and 3
MS 401A — Advanced Leadership Laboratory 3
MS 402 — Transition to Lieutenant; and 3
MS 402A — Advanced Leadership Laboratory 3

**MS 339 — Cooperative Education in Military Leadership (required to commission as a 2nd Lieutenant Electives of particular interest and value to military science as approved by military science advisor (300 level courses or above). 6

Minimum for minor 24

*Placement credit for these courses may be given to veterans, graduates of the college level ROTC summer programs, and participants in high school level ROTC programs.

**Require prior approval/permission by the department chair.

The following criteria must be met by all students in order to minor in military science:

1. Acceptance into the advanced course.
2. A cumulative GPA of 2.0 or better.
3. A GPA of 2.0 or better in the major field or area of concentration.
4. A GPA of 3.0 or better in military science.

The above standards may be waived, providing the cadet has a cumulative GPA of 2.25 or better, with the approval of a board consisting of the Professor of Military Science, the Dean of the Caudill College of Arts, Humanities & Social Sciences and an MS IV cadet who has the rank of cadet major or above.

Department of Music, Theatre & Dance

Paul Hammond, Interim Chair
106 Baird Music Hall
606-783-2473

The Department of Music, Theatre & Dance, a widely recognized and distinguished center of excellence, has an impressive history of serving and enriching the region since the 1920s. As part of a great University within the atmosphere of a small community, the department enrolls more than 300 majors that hail from several states and foreign countries and employs a distinguished faculty of more than 37 instructors with extensive credentials and professional expertise. Department alumni are recognized artists, scholars, teachers, and leaders in arts and arts education with noteworthy achievements regionally, nationally, and internationally. As an accredited institutional member of NASM and NAST, MSU offers undergraduate and graduate degree programs in Theatre, Theatre with a Teaching Certificate, Music Education, Jazz Studies, and Performance. A Minor in Traditional Music is offered in conjunction with MSU’s Kentucky Center for Traditional Music. Private music study is offered on orchestral and keyboard instruments, and voice, conducting, guitar and traditional instruments. Musical training and performance opportunities are also provided to students who are not planning musical careers.

Opportunities in Dance

The Department of Music, Theatre & Dance offers the Dance Minor program. All dance courses and the Dance Ensemble are open to all University students.

Dance Minor

THEA 105 — Modern Dance Technique 3
THEA 107 — Introduction to Dance 3
The process is used to determine the student’s readiness for entry into a music degree program. A scholarship audition may serve as a student’s admission audition. Placement examinations are given in piano prior to enrollment. The results are used for advisement as to course and program enrollment. Credit by examination for courses in the Class Piano sequences must be validated by the faculty and processed through the Department of Music, Theatre and Dance, The Testing Center, and the Office of the Registrar.

Transfer Student Admission

The music major entering the Department of Music, Theatre and Dance by transfer must submit an official transcript of all previous college work. The applicant should be prepared to validate achievements in the area of applied music, music theory, ear training and sight singing, keyboard proficiency, and the history and literature of music. Resolution of any deficiency must be initiated during the first registration period.

Advising and Program of Study

Students who are approved for unconditional entry into a music major or minor degree program must declare their intended program of study. A student who is not ready for entry into a music program may enroll in the prescribed music courses on a probationary basis until performance standards are met. These performance standards must be met by the end of the first academic year of enrollment. Students receive their initial program advising by the chair of the Department of Music, Theatre and Dance and thereafter by their private applied instructor. Students wishing to choose a different music degree program or principal applied area of study must receive departmental approval. The appropriate members of the music faculty, in consultation with the department chair, determine the student’s eligibility and suitability for the change and which previously earned credits, if any, apply to the new program of study.

Music Scholarships

Music scholarship awards are available to qualified students as determined through a scholarship audition. These awards serve numerous students annually. All awards are contingent upon admission to the University. The Music Scholarship Committee considers many criteria before recommending a candidate for a scholarship award including the candidate’s performance ability, potential for academic success, anticipated contribution to the program and the needs within the department. Music scholarship awards are renewable for up to four years provided the student meets the expectations of the scholarship agreement.

General Requirements and Advisories

Recital Attendance

Attending concerts and recitals is an essential ingredient of a professional musician’s training. Attending live performances ensures that all music majors and minors are exposed to a large and varied body of music and provides opportunities to enhance musical learning. Therefore, students are expected to attend concerts and recitals presented on campus as part of the overall study of music at MSU. Each faculty member who teaches Private Applied music has a grading policy that reflects this attitude and has estab-
lished expectations for recital attendance. In addition, music students are required to complete MUSM 200/400 Student Recital for the prescribed number of semesters with a passing grade (MUSM 200/400 is a pass-fail course). Regular attendance at the student recital hour is expected of all music students. The chair of the Department of Music, Theatre & Dance maintains attendance records and issues grades.

**Piano Proficiency**

All candidates for the Bachelor of Music Education, Bachelor of Music, and Bachelor of Arts degree with principal applied areas other than keyboard instruments are required to complete the four-semester sequence of Class Piano (MUSG 123, 124, 223, 224). Non-keyboard major students with previous keyboard experience may qualify for advanced placement in the Class Piano sequence. Exemption from the Class Piano sequence requires successful completion of the Piano Proficiency Examination. All students being exempted from one or more levels of Class Piano will be required to go to the Testing Center to register for credit by examination in order to receive "K" credit on their transcripts for all courses in the sequence for which they are recommended to be exempted. Credit by examination for courses in the Class Piano sequences must be validated by the faculty and processed through the Department of Music, Theatre and Dance, the Testing Center, and the Office of the Registrar. Students will not be allowed to substitute other courses or Private Applied Piano lessons for courses in the Class Piano Sequence.

**Ensembles**

All students are required to enroll each semester in residence in the ensemble course appropriate to the chosen program of study, results of a placement audition, Private Applied instrument area, and class standing. Students who are in residence for more than four full academic years are required to enroll for additional appropriate ensemble credit hours beyond those listed in the program requirements. These ensemble enrollment requirements are considered the minimum for music-major students; all music students are encouraged to participate in additional large and small ensembles, including chamber and jazz ensembles, in order to receive a more extensive performance experience and professional preparation.

**Private Applied Music**

Music majors and minors are required to designate a principal area of Private Applied music study and enroll each semester in residence for credit in this area as required by the program of study. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed in the program requirements. Credit may also be earned in secondary applied areas with permission of the instructor. Private Applied in principal instrument requires a performance examination before a jury of faculty members in their principal applied area at the end of each semester, except as excused by the Private Applied instructor after recital appearances. In addition, music major and minor students must register for MUSP 200/400 — Performance Class concurrently with Private Applied lessons in the principal applied area. Performance Class receives no credit and is graded pass/fail, but attendance and performance in this course may affect the student’s grade in Private Applied lessons. Credit hours for Private Applied music are variable. Normally, students enroll for two - three hours of credit depending on the requirements of the degree program and the advice of the Private Applied instructor. Students studying a secondary applied instrument normally enroll for one credit hour. Students are expected to practice at least one hour per day for each credit hour earned in Private Applied lessons.

One credit hour (MUSP 1XX and 3XX) intended for non-major on that instrument. A 30-minute lesson per week for the entire semester, implies one hour of personal practice per day by the student. Probationary music students register for this level and credit hours earned in MUSP1XX does not apply toward music major degree requirements. Probationary music students may be required by their instructor to register concurrently for MUSP 200 Performance Class.

Two credit hours (MUSP 2XX, 4XX and 6XX)—Major on that instrument only. A 60-minute lesson per week for the entire semester, implies two hours of personal practice per day by the student. Concurrent enrollment in MUSP 200/400 required.

Three credit hours (MUSP 2XX, 4XX and 6XX)—Major on that instrument only. A 60-minute lesson per week for the entire semester, implies three hours of personal practice per day by the student. Concurrent enrollment in MUSP 200/400 required.

Four credit hours (MUSP 2XX, 4XX and 6XX)—Major on that instrument only. A 60-minute lesson per week for the entire semester, implies four hours of personal practice per day by the student. Concurrent enrollment in MUSP 200/400 required.

**Degree Recitals and Hearings - Senior Project**

Students seeking the Bachelor of Music Education or Bachelor of Music degree must complete the Senior Recital on their principal performing instrument. Successful completion of the Senior Recital satisfies the integrative component in the General Education curriculum as the capstone course for the degree. Music Education majors complete MUSP 499C — Senior Recital, a three-credit hour course that requires a formal recital with an accompanying research paper and oral presentation covering the works and composers to be performed. Students in the Bachelor of Music program complete MUSP 360 — Junior Recital, a two-credit hour course that requires a formal recital, and MUSP 499C — Senior Recital, a three-credit hour course that requires a formal recital. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing. The recital hearing forms signed by the appropriate faculty must be filed in the students’ files in the Department Office. A copy of the accompanying paper/presentation media must also be filed in the student’s files in the Department Office. The Senior Project course, MUSW 499C, is an option for music BA students only. This course involves a performance component as well as a component involving the student’s academic interests. This project is required to have writing and presentation activities. The performance and academic components can be related. The project is to be developed by the student and his/her private applied teacher. The appropriate performance area faculty must sign the Senior Project Approval Form. This form and attached proposal narrative must be filed in the student’s file in the Department Office.

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Office. A copy of the accompanying paper/presentation media must also be filed in the student's files in the Department Office. Note: Recital Hearing Form and Senior Project Approval Form must be submitted with any performance program (in electronic format) to the Department Office no later than 2 weeks prior to the performance. If this information is not received by this time, the performance will be cancelled from the calendar.

**Music Fees**
- MUSE 215 Microcomputers and Music: $30
- Private Applied: $45 per credit hour (1-4 credit hour offerings)
- MUSP 360 Junior Recital (two credit hours): $90
- MUSP 360 Junior Recital (three credit hours): $135
- MUSP 470 Composition Recital (there credit hours): $135
- MUSP 498C Senior Recital (two credit hours): $90
- MUSP 499C Senior Recital (three credit hours): $135
- Instrument Rental Fee: $15 - $20 per semester

**Locker Rental**
- One locker per semester or summer session: $10
- One locker per academic year: $20

**Upper and Lower Division Enrollment**
- Lower division (100 and 200-level) Performance Class, Student Recital, and Private Applied are appropriate for students with freshman and sophomore standing; upper division (300 and 400-level) Performance Class, Student Recital and Private Applied lessons are appropriate for students with junior or senior standing. A 100-level private applied is designated for non-majors or students admitted as probationary music students. A 300-level private applied is designated for music majors wishing private study on a secondary instrument. All undergraduate students, freshman through senior standing, register for 300-level ensembles.

**Upper Division Assessment**
- Music majors and minors must successfully complete the Applied Music Upper Division Assessment before enrolling in 400-level Private Applied courses. The Upper Division Assessment includes an academic component and a performance component. To complete the academic component, students must successfully pass MUSG 124, MUST 233, MUST 236, four semesters each of MUSP 200 and MUSM 200 with a passing grade of "K," either MUSH 171 or MUSH 267, MUSE 207 (BME majors only), and eight credits of 200-level Private Applied in principal instrument with grade of "C" or better (BME and BA in Music majors only), or 12 credits of 200-level Private Applied in principal instrument with grade of "C" or better (BM majors only). To complete the performance component, students must meet the criteria set for their primary applied area during their end of semester jury performances. The Upper Division Assessment form in the student’s principal performance area must be signed by the appropriate faculty and filed in the Department Office.

**General Education**
- All undergraduate students must complete a required core of General Education courses. Please refer to the General Education catalog section for a detailed listing of the 36-credit hours of General Education courses common to all baccalaureate programs. Certain requirements in the major programs are met through requirements in the general education course work.

Refer to the General Education section for a complete listing of general education requirements for the University.

**Bachelor of Music Education (BME)**

**Program Competencies for the Bachelor of Music Education Degree**

As an accredited institutional member of the National Association of Schools of Music (NASM), Morehead State University adheres to and complies with the standards of the association. NASM "Competencies Common to All Professional Baccalaureate Degrees in Music and to All Undergraduate Degrees Leading to Teacher Certification" (NASM Handbook) define the program competencies for the Bachelor of Music Education and Bachelor of Music degree programs at MSU.

**A. Performance**

**Students must acquire:**
1. Technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
2. An overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
3. The ability to read music at sight with fluency.
4. Knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation. Rehearsal and conducting skills are required as appropriate to the particular music concentration.
5. Keyboard competency. Experiences in secondary performance areas are recommended.
6. Growth in artistry, technical skills, collaborative competence, and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.
7. Performance study and ensemble experiences that normally continue throughout the baccalaureate program.

**B. Aural Skills and Analysis**

**Students must acquire:**
1. An understanding of the common elements and organizational patterns of music and their interaction, and the ability to employ this understanding in aural, verbal, and visual analyses.
2. Sufficient understanding of musical forms, processes, and structures to use this knowledge in compositional, performance, scholarly, pedagogical, and historical contexts, according to the requisites of their specialization.
3. The ability to place music in historical, cultural, and stylistic contexts.

**C. Composition and Improvisation**

**Students must acquire:**
1. Rudimentary capacity to create derivative or original music both extemporaneously and in written form.
2. The ability to compose, improvise, or both at a basic level in one or more musical languages; for example, the imitation of
various musical styles, improvisation on pre-existing materials, the creation of original compositions, experimentation with various sound sources, and manipulating the common elements in nontraditional ways.

D. History and Repertory

**Students must acquire:**

1. A basic knowledge of music history through the present time.
2. An acquaintance with repertories beyond the area of specialization. All students must be exposed to a large and varied body of music through study and attendance at recitals, concerts, opera and musical theatre productions, and other performances.

E. Technology

**Students must acquire:**

1. A basic overview understanding of how technology serves the field of music as a whole.
2. Working knowledge of the technological developments applicable to their area of specialization.

F. Synthesis

**While synthesis is a lifetime process, by the end of undergraduate study students should be:**

1. Working independently on a variety of musical problems by combining their capabilities in performance; aural, verbal, and visual analysis; composition and improvisation; and history and repertory.
2. Forming and defending value judgments about music.
3. Acquiring the tools to work with a comprehensive repertory, including music from various cultures of the world and music of their own time.
4. Understanding basic interrelationships and interdependencies among the various professions and activities that constitute the musical enterprise.

**Assessment Procedures**

- Survey of Graduates
- Performance Recitals
- Exit Interview
- Senior Capstone Course

**Common Program Requirements**

This program is designed for students who are planning for careers as music teachers in the public schools. The BME program meets the requirements for the Integrated Music P-12 initial certificate. The Integrated Music P-12 certificate is the Kentucky license to teach general, instrumental, and vocal music, primary through 12th grade levels.

**Teacher Certification**

In order to fulfill state of Kentucky certification guidelines, the student must complete the departmental and University education requirements. A minimum of 68-70 semester hours in the area of music and 28 hours in professional education must be completed. Also, specific standards must be met for admission to the Teacher Education Program (TEP).

**IMPORTANT: Consult the TEP section of the Undergraduate Catalog for additional specific information about the requirements for entry into the TEP and completion of the teacher certification program.**

**Area of Specialization Requirements**

**BME: Woodwind and Brasswind**

Woodwind and Brasswind Music Education majors are required to enroll in and participate in all activities of the Marching Band each fall semester and in the Concert or Symphony Band each spring semester (enrollment in a concert band is determined by audition). Those students who perform in the Marching Band on an instrument other than their principal applied instrument must also participate in the Concert or Symphony Band on their principal applied instrument each fall semester. In addition, woodwind and brasswind music education majors are required to take two semesters of a choral ensemble (University Chorus, Concert Choir, or Chamber Singers).

**General Education**

- EDF 207 — Foundations of Education (SBS1) 3
- EDF 211 — Human Growth and Development (SBS2) 3
- ++MUSP 499C — Senior Recital (Capstone) 3

**General Education Total** 36

Refer to the General Education section for a complete listing of general education requirements for the University.

* Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400 level courses.

++ Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

**BME Core Requirements**

- MUST 131 — Music Theory I 3
- MUST 132 — Music Theory II 3
- MUST 236 — Music Theory III 2
- MUST 237 — Music Theory IV 2
- MUST 133 — Music Reading I 1
- MUST 135 — Music Reading II 1
- MUST 233 — Music Reading III 1
- MUST 234 — Music Reading IV 1
- MUSE 215 — Microcomputers and Music 3
- *MUSG 123 — Class Piano 1
- *MUSG 124 — Class Piano II 1
- *MUSG 223 — Class Piano III 1
- *MUSG 224 — Class Piano IV 1
- MUSH 267 — World Cultures Through Humanities 3
- MUSH 361 — History of Music I 3
- MUSH 362 — History of Western Music II 3

**Core Total** 30

*All students take the Class Piano Proficiency Exam upon entering this program. A recommendation for Class Piano placement is given by the screening faculty. If any student is
Woodwind/Brasswind Specialization Requirements

MUSM 200 — Student Recital (four semesters with passing grade of “K” required) 0
MUSM 400 — Student Recital (three semesters with passing grade of “K” required) 0
MUSP 2XX — Private Applied-Major Instrument 8
Course Number (two credit hours each of four semesters)

MUSM 200 — Performance Class-Major Instrument 0
Section Number (four semesters with passing grade of “K” required)

*MUSP 4XX — Private Applied-Major Instrument 4
Course Number (two credit hours each of two semesters)

*MUSP 400 — Performance Class-Major Instrument 0
Section Number (three semesters with passing grade of “K” required)

++MUSP 499C — Senior Recital (credit hours counted in Capstone section of General Education) 4

*MUSM 372 — Marching Band (four hours - one credit each semester registered) 3

#MUSM 370 — Concert or MUSM 371 — Symphony Band (three hours - one credit each semester registered)

MUSM 382 — Jazz Vocal Ensemble, 2
MUSM 391 — University Chorus, 1
MUSM 392 — Concert Choir, 1
MUSM 393 — Chamber Singers, or 1
MUSM 394 — OperaWorks (2 hours - 1 credit each semester registered) 1
MUSC 271 — Basic Conducting 2
MUSC 472 — Instrumental Conducting 2
MUSG 211 — Class Woodwinds I 1
MUSG 212 — Class Woodwinds II 1
MUSG 213 — Class Brasswinds I 1
MUSG 214 — Class Brasswinds II 1
MUSG 217 — Class Percussion 1
MUSG 226 — Class Strings 1
MUSG 239 — Class Voice 1
MUSI 430 — Arranging 2
MUSE 207 — Foundations of Music Education 3

**MUSE 325 — Materials and Methods for Elementary Grades 3

**MUSE 376 — Instrumental Materials and Methods 3

Music Electives — select from the following:
MUSC 471, MUSC 473, MUSE 377, MUSE 416, 1
MUSE 479, MUSG 183, MUSH 490, and MUSM 3XX 1
(any ensemble)

Specialization Total 48

Music Electives (five credit hours)

* Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.
+ Must be taken each spring semester in residence except for Clinical Practice. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed.
# Must be taken each spring semester in residence except for Clinical Practice. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed.

** Admission to TEP required.
++ Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Professional Education Requirements

*EDF 207 — Foundations of Education (credit hours counted in SBS I section of Gen. Ed. Distribution Courses) 3
*EDF 211 — Human Growth and Development (credit hours counted in SBS II section of General Education Distribution Courses) 3
**EDF 311 — Learning Theories and Assessment 3
***EDSE 416 — Clinical Practice 12

Professional Education Requirements Total 15

* Successful completion prerequisite for admission to Teacher Education Program (TEP)

** Admission to TEP is required to enroll in these courses.

*** Application for Clinical Practice submitted one semester in advance to Educational Services Unit.

Components of Degree Requirement

General Education 36
Core Total 30
Specialization Requirements Total 48
Professional Education Requirements Total 15

Degree Requirement Total 129

BME: Percussion

Percussion Music Education majors are required to enroll in and participate in all activities of the Marching Band each fall semester and in the Concert or Symphony Band each spring semester (enrollment in a concert band is determined by audition). Those students who perform in the Marching Band on an instrument other than their principal applied instrument must also participate in the Concert or Symphony Band on their principal applied instrument each fall semester. In addition, percussion music education majors are required to take two semesters of a choral ensemble (University Chorus, Concert Choir, or Chamber Singers).
General Education
EDF 207 — Foundations of Education (SBS I) 3
EDF 211 — Human Growth and Development (SBS II) 3
++*MUSP 499C — Senior Recital (Capstone) 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

* Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400 level courses.
++ Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

BME Core Requirements
MUST 131 — Music Theory I 3
MUST 132 — Music Theory II 3
MUST 234 — Music Theory III 2
MUST 234 — Music Theory IV 2
MUST 133 — Music Reading I 1
MUST 135 — Music Reading II 1
MUST 233 — Music Reading III 1
MUST 234 — Music Reading IV 1
MUSE 215 — Microcomputers and Music 3
*MUSG 123 — Class Piano 1
*MUSG 124 — Class Piano II 1
*MUSG 223 — Class Piano III 1
*MUSG 224 — Class Piano IV 1
MUSH 267 — World Cultures Through Humanities 3
MUSH 361 — History of Music I 3
MUSH 362 — History of Western Music II 3

Core Total 30

* All students take the Class Piano Proficiency Exam upon entering this program. A recommendation for Class Piano placement is given by the screening faculty. If a student is recommended for placement in any section of Class Piano other than MUSG 123 Class Piano I, they must complete the Examination(s) for Credit coordinated by the MSU Testing Center. Students successfully completing the exam will be given a passing grade of “K” for each level they test out of. The completion of the courses by exam will also appear on the student’s official check sheet and transcripts.

Percussion Specialization Requirements
MUSM 200 — Student Recital (four semesters with passing grade of "K" required) 0
MUSM 400 — Student Recital (three semesters with passing grade of "K" required) 0
MUST 430 — Arranging 2
MUSP 219 — Private Percussion 8
two hours upper division
*MUSP 419 — Private Percussion 4
MUSP 200 — Performance Class (four semesters with passing grade of "K" required) 0

*MUSP 400 — Performance Class (three semesters with passing grade of "K" required)
MUSM 369 — Percussion Ensemble (six semesters) 6
#MUSM 370 — Concert or MUSM 371 — Symphony Band (three semesters)
+MUSM 372 — Marching Band 4
MUSM 382, MUSM 391, MUSM 392, MUSM 393, or MUSM 394 (one credit each)
MUSC 121 — Basic Conducting 2
MUSC 472 — Instrumental Conducting 2
MUSG 211 — Class Woodwinds* 1
MUSG 212 — Class Woodwinds II 1
MUSG 213 — Class Brasswinds* 1
MUSG 214 — Class Brasswinds II 1
MUSG 226 — Class Strings* 1
MUSG 239 — Class Voice (instrumental section) 1
MUSE 207 — Foundations of Music Education 3
**MUSE 325 — Materials and Methods for Elementary Grades 3
**MUSE 376 — Instrumental Methods and Materials 3

Specialization Requirements Total 48

* Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.
+ Must be taken each fall semester in residence except for Clinical Practice. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed.
** Admission to TEP required.

# Must be taken each spring semester in residence except for Clinical Practice. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed.

Professional Education
*EDF 207 — Foundations of Education (credit hours counted in SBS I of General Education Distribution Courses) 3
*EDF 211 — Human Growth and Development (credit hours counted in SBS II of General Education Distribution Courses) 3
**EDF 311 — Learning Theories and Assessment in Education 3
***EDSE 416 — Clinical Practice 12

Professional Education Total 15

* Successful completion prerequisite for admission to Teacher Education Program (TEP)
** Admission to TEP is required to enroll in these courses.
*** Application for Clinical Practice submitted one semester in advance to Educational Services Unit.

Components of Degree Requirement
General Education 36
Core Total 30
Specialization Requirements Total 48
Professional Education Total 15

Degree Requirement Total 129
BME: Voice

Vocal Music Education majors are required, upon successful audition, to enroll and participate in all activities of the Concert Choir. Students with an unsuccessful audition for Concert Choir enroll in the University Chorus.

**General Education**

*EDF 207 — Foundations of Education (SBS I) 3
**EDF 211 — Human Growth and Development (SBS II) 3
*MUSM 499C — Senior Recital (Capstone) 3

**General Education Total** 36

Refer to the General Education section for a complete listing of general education requirements for the University.

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

**Successful completion prerequisite for admission to Teacher Education Program (TEP).

+Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

**BME Core Requirements**

MUST 131 — Music Theory I 3
MUST 132 — Music Theory II 3
MUST 236 — Music Theory III 2
MUST 237 — Music Theory IV 2
MUST 133 — Music Reading I 1
MUST 135 — Music Reading II 1
MUST 233 — Music Reading III 1
MUST 234 — Music Reading IV 1
MUSE 215 — Microcomputers and Music 3
*MUSG 123 — Class Piano 1
*MUSG 124 — Class Piano II 1
*MUSG 223 — Class Piano III 1
*MUSG 224 — Class Piano IV 1
MUSH 267 — World Cultures Through Humanities 3
MUSH 361 — History of Music I 3
MUSH 362 — History of Western Music II 3

**Core Total** 30

*All students take the Class Piano Proficiency Exam upon entering this program. A recommendation for Class Piano placement is given by the screening faculty. If any student is recommended for placement in any section of Class Piano other than MUSG 123 Class Piano I, they must complete the Examination(s) for Credit coordinated by the MSU Testing Center. Students successfully completing the exam will be given a passing grade of “K” for each level they test out of. The completion of the courses by exam will also appear on the student’s official check sheet and transcripts

**Voice Specialization Requirements**

MUSM 200 — Student Recital 0

(complete four semesters with passing grade of "K" required)

MUSM 400 — Student Recital (complete three semesters with passing grade of "K" required)
MUSP 2XX — Private Applied Area (principal instrument course number)+
Two hours upper division
*MUSP 4XX — Private Applied Area (principal instrument course number)
MUSP 200 — Performance Class (Complete four semesters with passing grade of "K" required)
*MUSP 400 — Performance Class - Major Instrument Section Number (Complete three semesters with passing grade of "K" required)
#MUSM 392 — Concert Choir (seven semesters) 7
MUSM 382, MUSM 391, MUSM 392, MUSM 393, or MUSM 394 (one credit each)
MUSC 271 — Basic Conducting 2
MUSC 471 — Choral Conducting 2
MUSG 240 — Diction for Singers I 1
MUSG 241 — Diction for Singers II 1
MUST 430 — Arranging 2
MUSE 207 — Foundations of Music Education 3
**MUSE 325 — Materials and Methods for Elementary Grades 3
**MUSE 375 — Vocal Materials and Methods 3
**MUSE 416 — Vocal Pedagogy 2
Select from the following (1 credit each):
MUSG 211, MUSG 212, MUSG 213, MUSG 214, MUSG 217, MUSG 226
Music Electives selected from:
MUSC 472, MUSC 473, MUSE 377, MUSE 479, MUSG 183, MUSH 490 and MUSM 3XX (any ensemble)

**Specialization Requirements** 48

* Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.
#Must be taken each semester in residence except for Clinical Practice. Students who are in residence for more than four full academic years are required to enroll for additional credit hours beyond those listed.

**Admission to TEP required.

**Professional Education**

**EDF 207 — Foundations of Education (hours counted in General Education section)
**EDF 211 — Human Growth and Development (hours counted in General Education section)
*EDF 311 — Learning Theories and Assessment in Education
***EDSE 416 — Clinical Practice 12

**Professional Education Total** 15

*Admission to TEP is required to enroll in these courses.

**Successful completion prerequisite for admission to Teacher Education Program (TEP).

***Application for clinical practice submitted one semester in
Components of Degree Requirement

General Education  36
Core Total  30
Specialization Total  48
Professional Education Total  15

Degree Requirement Total  129

BME: Orchestral Strings

Orchestral String Music Education majors are required to enroll in and participate in all activities of the Orchestra. In addition, orchestral string Music Education majors are required to take two semesters of a choral ensemble (University Chorus, Concert Choir, or Chamber Singers).

General Education

EDF 207 — Foundations of Education (SBS I)  3
EDF 211 — Human Growth and Development (SBS II)  3
MUSP 499C — Senior Recital (Capstone)  3

General Education Total  36

Refer to the General Education section for a complete listing of general education requirements for the University.

BME Core Requirements

MUST 131 — Music Theory I  3
MUST 132 — Music Theory II  3
MUST 236 — Music Theory III  2
MUST 237 — Music Theory IV  2
MUST 133 — Music Reading I  1
MUST 135 — Music Reading II  1
MUST 233 — Music Reading III  1
MUST 234 — Music Reading IV  1
MUSE 215 — Microcomputers and Music 3
*MUSG 123 — Class Piano 1
*MUSG 124 — Class Piano II 1
*MUSG 223 — Class Piano III 1
*MUSG 224 — Class Piano IV 1
MUSH 267 — World Cultures Through Humanities 3
MUSH 361 — History of Music I 3
MUSH 362 — History of Western Music II 3

Core Total  30

*All students take the Class Piano Proficiency Exam upon entering this program. A recommendation for Class Piano placement is given by the screening faculty. If any student is recommended for placement in any section of Class Piano other than MUSG 123 Class Piano I, they must complete the Examination(s) for Credit coordinated by the MSU Testing Center. Students successfully completing the exam will be given a passing grade of “K” for each level they test out of. The completion of the courses by exam will also appear on the student’s official check sheet and transcripts.

Orchestral Strings Specialization Requirements

MUSM 200 — Student Recital  0
(complete four semesters with passing grade of "K" required)
MUSM 400 — Student Recital  0

Two hours upper division
*MUSP 4XX — Private Applied Area
(Principal instrument course number)
MUSP 200 — Performance Class (0 credit hours with four semesters of passing grade if "K" required)
*MUSP 400 — Performance Class (0 credit hours with three semesters of passing grade of "K" required)
(Principal instrument section number)

Examination(s) for Credit coordinated by the MSU Testing Center. Students successfully completing the exam will be given a passing grade of “K” for each level they test out of. The completion of the courses by exam will also appear on the student’s official check sheet and transcripts.

Professional Education

**EDF 207 — Foundations of Education (hours counted in General Education section)
**EDF 211 — Human Growth and Development (hours counted in General Education section)
*EDF 311 — Learning Theories and Assessment in Education
***EDSE 416 — Clinical Practice
Professional Education Total 15
*Admission to TEP is required to enroll in these courses.
**Successful completion prerequisite for admission to Teacher Education Program (TEP).
***Application for clinical practice submitted one semester in advance to Educational Service Unit.

Components of Degree Requirement

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Bachelor of Music (BM)

Program Competencies for the Bachelor of Music

As an accredited institutional member of the National Association of Schools of Music (NASM), Morehead State University adheres to and complies with the standards of the association. NASM "Competencies Common to All Professional Baccalaureate Degrees in Music and to All Undergraduate Degrees Leading to Teacher Certification" (NASM Handbook) define the program competencies for the Bachelor of Music Education and Bachelor of Music degree programs at MSU.

A. Performance

**Students must acquire:**

1. Technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration.
2. An overview understanding of the repertory in their major performance area and the ability to perform from a cross section of that repertory.
3. The ability to read music at sight with fluency.
4. Knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation. Rehearsal and conducting skills are required as appropriate to the particular music concentration.
5. Keyboard competency. Experiences in secondary performance areas are recommended.
6. Growth in artistry, technical skills, collaborative competence, and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.
7. Performance study and ensemble experiences that normally continue throughout the baccalaureate program.

B. Aural Skills and Analysis

**Students must acquire:**

1. An understanding of the common elements and organizational patterns of music and their interaction, and the ability to employ this understanding in aural, verbal, and visual analyses.
2. Sufficient understanding of musical forms, processes, and structures to use this knowledge in compositional, performance, scholarly, pedagogical, and historical contexts, according to the requisites of their specialization.
3. The ability to place music in historical, cultural, and stylistic contexts.

C. Composition and Improvisation

**Students must acquire:**

1. Rudimentary capacity to create derivative or original music both extemporaneously and in written form.
2. The ability to compose, improvise, or both at a basic level in one or more musical languages; for example, the imitation of various musical styles, improvisation on pre-existing materials, the creation of original compositions, experimentation with various sound sources, and manipulating the common elements in nontraditional ways.

D. History and Repertory

**Students must acquire:**

1. A basic knowledge of music history through the present time.
2. An acquaintance with repertories beyond the area of specialization. All students must be exposed to a large and varied body of music through study and attendance at recitals, concerts, opera and musical theatre productions, and other performances.

E. Technology

**Students must acquire:**

1. A basic overview understanding of how technology serves the field of music as a whole.
2. Working knowledge of the technological developments applicable to their area of specialization.

F. Synthesis

**While synthesis is a lifetime process, by the end of undergraduate study students should be:**

1. Working independently on a variety of musical problems by combining their capabilities in performance; aural, verbal, and visual analysis; composition and improvisation; and history and repertory.
2. Forming and defending value judgments about music.
3. Acquiring the tools to work with a comprehensive repertory, including music from various cultures of the world and music of their own time.
4. Understanding basic interrelationships and interdependencies among the various professions and activities that constitute the musical enterprise.

Assessment Procedures

- Survey of Graduates
- Performance Recitals
- Exit Interview
- Senior Capstone Course

BM: Woodwind, Brasswind (Area of Concentration)

Woodwind and Brasswind majors are required to enroll in and participate in all activities of the Concert Band, Symphony Band, or Marching Band. Those students who perform in the Marching Band on an instrument other than their principal applied instru-
ment must also participate in the Concert or Symphony Band on their principal applied instrument each fall semester (enrollment in a concert band is determined by audition).

General Education
*MUSP 499C — Senior Recital (Capstone)  3

General Education Total  36

Refer to the General Education section for a complete listing of general education requirements for the University.

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Program Requirements
MUSC 271 — Basic Conducting  2
MUSC 472 — Instrumental Conducting  2
MUSC 215 — Microcomputers and Music  3
MUSC 480 — Private Applied Pedagogy  1
*MUSG 123 — Class Piano I  1
*MUSG 124 — Class Piano II  1
*MUSG 223 — Class Piano III  1
**MUSG 224 — Class Piano IV  1
MUSG 123 — Class Piano I*  1
MUSG 124 — Class Piano II*  1
MUSG 223 — Class Piano III*  1
**MUSG 224 — Class Piano IV*  1
MUSM 360 — Private Applied  6
MUSM 381 — Jazz Ensemble II  2
MUSM 363 — Tuba/Euphonium Ensemble or Brasswind Ensemble  3
MUSM 368 — Woodwind Ensemble  2
MUSM 369 — Symphonic Band  3
MUSM 370 — Concert Band or  8
MUSM 371 — Orchestra or  2
MUSM 381 — Jazz Ensemble II  2
MUSM 300 — Student Recital  0
MUSM 400 — Student Recital  0
MUSM 400 — Performance Class  0
*MUSP 400 — Performance Class  0
MUSP 2XX — Private Applied  12
*MUSP 4XX — Private Applied  6
**MUSP 360 — Junior Recital  3
MUST 131 — Music Theory I  3
MUST 132 — Music Theory II  3
MUST 133 — Music Reading I  1
MUST 135 — Music Reading II  1
MUST 233 — Music Reading III  1
MUST 234 — Music Reading IV  1
MUST 236 — Music Theory III  2
MUST 237 — Music Theory IV  2
MUST 430 — Arranging  2
MUST 465 — Form and Analysis  2
MUSW 310 — Music Business  3
MUSW 483 — Comprehensive Exit Examination  0
Music Electives - 300 level and above  5
MUSG 183, MUSH 490, MUSM 3XX (any ensemble)  5

Program Requirements Total  84

* Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

** All students take the Class Piano Proficiency Exam upon entering this program. A recommendation for Class Piano placement is given by the screening faculty. If any student is recommended for placement in any section of Class Piano other than MUSG 123 Class Piano I, they must complete the Examination(s) for Credit coordinated by the MSU Testing Center. Students successfully completing the exam will be given a passing grade of “K” for each level they test out of. The completion of the courses by exam will also appear on the student’s official check sheet and transcripts.

Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Components of Degree Requirement
General Education  36
Program Requirements  84
Degree Requirement Total  120

BM: Percussion (Area of Concentration)

General Education
*MUSP 499C — Senior Recital (Capstone)  3

General Education Total  36

Refer to the General Education section for a complete listing of general education requirements for the University.

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Program Requirements
MUSC 271 — Basic Conducting  2
MUSC 472 — Instrumental Conducting  2
MUSC 215 — Microcomputers and Music  3
MUSE 377, MUSE 416, MUSE 479, MUSG 183, MUSH 490, MUSM 3XX (any ensemble)  5
MUST 237 — Music Theory IV  2
MUST 430 — Arranging  2
MUST 465 — Form and Analysis  2
MUSW 310 — Music Business  3
MUSW 483 — Comprehensive Exit Examination  0
Music Electives - 300 level and above  5
MUSG 183, MUSH 490, MUSM 3XX (any ensemble)  5

Program Requirements Total  84
**MUSG 124 — Class Piano II** 1
**MUSG 223 — Class Piano III** 1
**MUSG 224 — Class Piano IV** 1
MUSG 183 — Studio Improvisation 1
MUSH 171 — Global Perspectives in Music 3
MUSH 361 — History of Western Music I 3
MUSH 362 — History of Western Music II 3
MUSM 369 — Percussion Ensemble 8
MUSM 372 — Marching Band 4
MUSM 370 — Concert Band or Symphony Band 4
MUSM 200 — Student Recital 0
MUSM 400 — Student Recital 0
MUSM 200 — Performance Class 0
*MUSP 400 — Performance Class* 0
MUSP 2XX — Private Applied 12
*MUSP 4XX — Private Applied* 6
*MUSP 360 — Junior Recital* 3
MUST 131 — Music Theory I 3
MUST 132 — Music Theory II 3
MUST 133 — Music Reading I 1
MUST 135 — Music Reading II 1
MUST 233 — Music Reading III 1
MUST 234 — Music Reading IV 1
MUST 236 — Music Theory III 2
MUST 237 — Music Theory IV 2
MUST 430 — Arranging 2
MUST 465 — Form and Analysis 2
MUSW 310 — Music Business 2
Music Electives - 300 level and above 4
MUSC 471, MUSC 473, MUSE 377, MUSE 416, MUSE 479, MUSG 183, MUSH 490, MUSM 3XX 84

Program Requirements Total

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

**All students take the Class Piano Proficiency Exam upon entering this program. A recommendation for Class Piano placement is given by the screening faculty. If any student is recommended for placement in any section of Class Piano other than MUSG 123 Class Piano I, they must complete the Examination(s) for Credit coordinated by the MSU Testing Center. Students successfully completing the exam will be given a passing grade of “K” for each level they test out of. The completion of the courses by exam will also appear on the student’s official check sheet and transcripts.

*Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Components of Degree Requirement

General Education Requirements 36
Program Requirements 84

Degree Requirement Total 120

BM: Voice (Area of Concentration)

Voice majors are required, upon successful audition, to enroll in and participate in all activities of the Concert Choir. Students with an unsuccessful audition for Concert Choir enroll in the University Chorus.

General Education

*+MUSP 499C — Senior Recital (Capstone) 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

*Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Program Requirements

MUSC 271 — Basic Conducting 2
MUSE 215 — Microcomputers and Music 3
MUSP 480 — Private Applied Pedagogy 1
**MUSG 123 — Class Piano I** 1
**MUSG 124 — Class Piano II** 1
**MUSG 223 — Class Piano III** 1
**MUSG 224 — Class Piano IV** 1
MUSG 240 — Diction for Singers I 1
MUSG 241 — Diction for Singers II 1
MUSH 171 — Global Perspectives in Music 3
MUSH 361 — History of Western Music I 3
MUSH 362 — History of Western Music II 3
MUSM 392 — Jazz Vocal Ensemble 4
MUSM 393 — Chamber Singers, or Opera Works 4
MUSM 394 — Private Voice 0
(Musical Electives - 300 level and above)

(Musical Electives - 300 level and above)

(Musical Electives - 300 level and above)

(Musical Electives - 300 level and above)

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(Musical Electives - 300 level and above)

(Musical Electives - 300 level and above)
Program Requirements
MUSC 271 — Basic Conducting 2
MUSE 215 — Microcomputers and Music 3
MUSE 378 — Keyboard Pedagogy 2
MUSG 125 — Score Reading 2
MUSG 183 — Studio Improvisation 1
MUSP 334 — Private Jazz 3
MUSH 171 — Global Perspectives in Music 3
MUSH 361 — History of Western Music I 3
MUSH 362 — History of Western Music II 3
MUSH 481 — Keyboard Literature 3
MUSM 389 — Keyboard Ensemble 4
MUSM 345 — Keyboard Chamber Music 4
MUSM 387 — Accompanying I 2
MUSM 3XX — Any Ensemble 4
MUSM 200 — Student Recital 0
MUSM 400 — Student Recital 0
MUSP 200 — Performance Class 0
*MUSP 400 — Performance Class 0
MUSP 2XX — Private Applied - Major Instrument 12
(three credit hours each of four semesters)
*MUSP 4XX — Private Applied 6
(three credit hours each of two semesters)
*MUSP 360 — Junior Recital 3
MUSP 3XX — Private Applied or any Secondary Instrument
BM: Keyboard (Area of Concentration)
Organ or Harpsichord majors are required to enroll in collaborative and ensemble keyboard courses.

Components of Degree Requirement
General Education Requirements 36
Program Requirements 84
Degree Requirements Total 120

BM: Keyboard (Area of Concentration)
Organ or Harpsichord majors are required to enroll in collaborative and ensemble keyboard courses.

General Education
*MUSP 499C — Senior Recital (Capstone) 3
General Education Total 36
Refer to the General Education section for a complete listing of general education requirements for the University.

+Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

+Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Components of Degree Requirement
General Education Requirements 36
Program Requirements 84
Degree Requirement Total 120
BM: Collaborative Piano (Area of Concentration)

**General Education**
*+MUSP 499C — Senior Recital (Capstone) 3

**General Education Total** 36

Refer to the General Education section for a complete listing of general education requirements for the University.

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

+Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

**Program Requirements**

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<th>Course Code</th>
<th>Course Title</th>
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<td>Microcomputers and Music</td>
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<td>MUSG 183</td>
<td>Studio Improvisation or Private Jazz</td>
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<td>MUSP 334</td>
<td>Private Jazz</td>
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<td>MUSG 240</td>
<td>Diction for Singers I</td>
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<td>Diction for Singers II</td>
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<td>MUSH 171</td>
<td>Global Perspectives in Music</td>
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<td>MUSH 361</td>
<td>History of Western Music I</td>
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<td>MUSH 362</td>
<td>History of Western Music II</td>
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<td>MUSH 481</td>
<td>Keyboard Literature</td>
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<td>MUSH 492</td>
<td>Solo Vocal Literature</td>
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<td>MUSM 389</td>
<td>Keyboard Ensemble or 2</td>
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<td>MUSM 345</td>
<td>Keyboard Chamber Music</td>
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<td>MUSM 387</td>
<td>Accompanying I</td>
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<td>Student Recital 0</td>
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(four semesters with passing grade of "K" required)

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(four semesters with passing grade of "K" required)

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<td>MUSP 4XX</td>
<td>Private Applied - Major Instrument</td>
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<td>Private Applied - Secondary Instrument</td>
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</tbody>
</table>

**Program Requirements Total** 84

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

+Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

**Components of Degree Requirement**

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<tr>
<th>Component</th>
<th>Credits</th>
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<tr>
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<td><strong>Degree Requirement Total</strong></td>
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</table>

BM: Orchestral Strings (Area of Concentration)

Orchestral string majors are required to enroll in and participate in all activities of the Orchestra.

**General Education**
*+MUSP 499C - Senior Recital (Capstone) 3

**General Education Total** 36

Refer to the General Education section for a complete listing of general education requirements for the University.

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

+Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

**Program Requirements**

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<th>Course Code</th>
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<tbody>
<tr>
<td>MUSC 271</td>
<td>Basic Conducting</td>
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<tr>
<td>MUSC 472</td>
<td>Instrumental Conducting</td>
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<td>MUSE 215</td>
<td>Microcomputers and Music</td>
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<tr>
<td>MUSP 480</td>
<td>Private Applied Pedagogy</td>
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<tr>
<td><strong>MUSG 123</strong> — Class Piano I</td>
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<tr>
<td><strong>MUSG 124</strong> — Class Piano II</td>
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<td><strong>MUSG 223</strong> — Class Piano III</td>
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<td><strong>MUSG 224</strong> — Class Piano IV</td>
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<td>MUSG 171</td>
<td>Global Perspectives in Music</td>
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<td>MUSH 361</td>
<td>History of Western Music I</td>
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<td>MUSM 3XX</td>
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<td>MUSM 200</td>
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Program Requirements

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<td>MUSC 473 — Rehearsal Techniques for Jazz Ensembles</td>
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<tr>
<td>**MUSG 123 — Class Piano I,</td>
<td>2</td>
</tr>
<tr>
<td>**MUSG 124 — Class Piano II,</td>
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</tr>
<tr>
<td>**MUSG 223 — Class Piano III,</td>
<td></td>
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<tr>
<td>**MUSG 224 — Class Piano IV,</td>
<td></td>
</tr>
<tr>
<td>**MUSG 345 — Jazz Keyboard III or</td>
<td></td>
</tr>
<tr>
<td>MUSG 346 — Jazz Keyboard IV</td>
<td></td>
</tr>
<tr>
<td>Jazz Pianists must do 345, 346</td>
<td></td>
</tr>
<tr>
<td>**MUSG 245 — Jazz Keyboard I</td>
<td>1</td>
</tr>
<tr>
<td>**MUSG 246 — Jazz Keyboard II</td>
<td>1</td>
</tr>
<tr>
<td>MUSG 183 — Studio Improvisation</td>
<td>2</td>
</tr>
<tr>
<td>MUSG 383 — Studio Improvisio</td>
<td>2</td>
</tr>
<tr>
<td>MUSH 171 — Global Perspectives in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSH 361 — History of Western Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSH 362 — History of Western Music II</td>
<td>3</td>
</tr>
<tr>
<td>MUSH 365 — Jazz History and Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 380 — Jazz Ensemble I</td>
<td>8</td>
</tr>
<tr>
<td>MUSM 381 — Jazz Ensemble II</td>
<td></td>
</tr>
<tr>
<td>MUSM 382 — Jazz Vocal Ensemble or</td>
<td></td>
</tr>
<tr>
<td>MUSM 384 — Guitar Ensemble</td>
<td></td>
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<tr>
<td>MUSM 337 — Jazz Combo</td>
<td>4</td>
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<tr>
<td>MUSM 200 — Student Recital</td>
<td>0</td>
</tr>
<tr>
<td>MUSM 400 — Student Recital</td>
<td>0</td>
</tr>
<tr>
<td>MUSP 200 — Performance Class</td>
<td>0</td>
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<tr>
<td>*MUSP 400 — Performance Class (Jazz Section)</td>
<td>0</td>
</tr>
<tr>
<td>MUSP 2XX — Private Applied</td>
<td>12</td>
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<tr>
<td>*MUSP 4XX — Private Applied (Principal Instrument)</td>
<td>6</td>
</tr>
<tr>
<td>MUSP 434 — Private Jazz</td>
<td></td>
</tr>
<tr>
<td>*MUSP 360 — Junior Recital</td>
<td>3</td>
</tr>
<tr>
<td>MUST 131 — Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUST 132 — Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUST 133 — Music Reading I</td>
<td>1</td>
</tr>
<tr>
<td>MUST 135 — Music Reading II</td>
<td>1</td>
</tr>
<tr>
<td>MUST 233 — Music Reading III</td>
<td>1</td>
</tr>
<tr>
<td>MUST 234 — Music Reading IV</td>
<td>1</td>
</tr>
<tr>
<td>MUST 236 — Music Theory III</td>
<td>2</td>
</tr>
<tr>
<td>MUST 237 — Music Theory IV</td>
<td>2</td>
</tr>
<tr>
<td>MUST 430 — Arranging</td>
<td>2</td>
</tr>
<tr>
<td>MUST 465 — Form and Analysis</td>
<td>2</td>
</tr>
<tr>
<td>MUSW 310 — Music Business</td>
<td>2</td>
</tr>
<tr>
<td>*Music Electives - 300 level or above</td>
<td>5</td>
</tr>
<tr>
<td>MUSC 471, MUSC 473, MUSE 377, MUSE 416, MUSE</td>
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<tr>
<td>479, MUSG 183, MUSH 490, MUSM 3XX</td>
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</tr>
</tbody>
</table>

Program Requirements Total 84

*Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400-level courses.

+Appropriate area performance faculty approval required in the form of a recital hearing. The Senior Recital also requires an accompanying research paper and oral presentation covering the works and composers to be performed. Prior to scheduling a recital, the proposed program must be presented for approval by a committee of applied faculty. Students receive approval by successfully completing a recital hearing.

Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>General Education Requirements</td>
<td>36</td>
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<tr>
<td>Program Requirements</td>
<td>84</td>
</tr>
<tr>
<td>Degree Requirement Total</td>
<td>120</td>
</tr>
</tbody>
</table>

BM: Jazz Studies (Area of Concentration)

Jazz Studies majors are required to enroll in and participate in all activities of the Jazz and/or Guitar Ensembles (enrollment in a jazz ensemble is determined by audition).

General Education

MUSP 499C · Senior Recital (Capstone) 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.
**Program Requirements Total** 84

**Program Requirements**

**Bachelor of Arts in Music (BA in Music)**

**Program Competencies**

As an accredited institutional member of the National Association of Schools of Music (NASM), Morehead State University adheres to and complies with the standards of the association. NASM "Standards for the Liberal Arts Degree with a Major in Music" (NASM Handbook) define the program competencies for the Bachelor of Arts degree in Music at MSU.

**A. General Education**

The principal goals of general education in undergraduate liberal arts programs with a major in music are:

1. The ability to think, speak, and write clearly and effectively. Students who earn liberal arts degrees must be able to communicate with precision, cogency, and force.
2. An informed acquaintance with the mathematical and experimental methods of the physical and biological sciences with the main forms of analysis and the historical and quantitative techniques needed for investigating the workings and developments of modern society.
3. An ability to address culture and history from a variety of perspectives.
4. Understanding of, and experience in thinking about, moral and ethical problems.
5. The ability to respect, understand, and evaluate work in a variety of disciplines.
6. The capacity to explain and defend one’s views effectively and rationally.
7. Understanding of and experience in art forms other than music.

**B. Musicianship**

Musicianship studies appropriate to the liberal arts degree must produce:

1. The ability to hear, identify, and work conceptually with the elements of music rhythm, melody, harmony, and structure.
2. An understanding of compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces.
3. An acquaintance with a wide selection of musical literature, the principal eras, genres, and cultural sources.
4. The ability to develop and defend musical judgments.

**C. Performance and Music Electives**

Instruction in the performing medium, participation in large and small ensembles, and experience in solo performance develop these competencies.

Performance studies appropriate to the liberal arts degree should produce:

1. Ability in performing areas appropriate to the student’s needs and interests.
2. Ability to sight-read music.
3. An understanding for procedures for realizing a variety of musical styles.

**Assessment Procedures**

Survey of Graduates, Major Field Exam, Performance Recitals, Exit Interview

**Program Requirements**

The Bachelor of Arts degree in Music provides for the study of music within a liberal arts curriculum. The program is suitable for preparing for careers in music other than performance and certified teaching in the schools. Bachelor of Arts degree in Music majors are required to enroll in and participate in activities of the University Chorus, Concert Choir, Concert Band, Symphony Band, Marching Band, or Orchestra (enrollment in a concert or choral ensemble is determined by audition). Voice majors are required, upon successful audition, to enroll in and participate in all activities of the Concert Choir. Students with an unsuccessful audition for Concert Choir enroll in the University Chorus. Woodwind, brasswind, and percussion majors are required to enroll in and participate in all activities of the Concert Band, Symphony Band, or Marching Band. Those students who perform in the Marching Band on an instrument other than their principal applied instrument must also participate in the Concert or Symphony Band each fall semester (enrollment in a concert band is determined by audition).

**General Education**

*+MUSW 499C — Senior Project (Capstone) 3

**General Education Total** 36

Refer to the General Education section for a complete listing of general education requirements for the University.
Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400 level courses.

The Senior Project course is an option for music BA students only. This course involves a performance component as well as a component involving the student’s academic interests. This project is required to have writing and presentation activities. The performance and academic components can be related. The project is to be developed by the student and his/her private applied teacher. Approval required from appropriate area performance faculty.

Program Requirements

MUSE 215 — Microcomputers and Music 3
**MUSG 123 — Class Piano I 4
**MUSG 124 — Class Piano II 4
**MUSG 223 — Class Piano III 4
MUSG 224 — Class Piano IV 4
MUSH 171 — Global Perspectives in Music 3
MUSH 361 — History of Western Music I 3
MUSH 362 — History of Western Music II 3

#MUSM 3XX 4
(Choose four credits from one area)
Bands
Choirs
Traditional Music/Guitar
Orchestras
Keyboard Ensembles
Jazz Ensembles
MUSM 200 — Student Recital 0
MUSM 400 — Student Recital 0
MUSP 200 — Class Performance 0
*MUSP 400 — Class Performance 0
MUSP 2XX — Private Applied 8
*MUSP 4XX — Private Applied 6
MUST 131 — Music Theory I 3
MUST 132 — Music Theory II 3
MUST 133 — Music Reading I 1
MUST 135 — Music Reading II 1
MUST 233 — Music Reading III 1
MUST 234 — Music Reading IV 1
MUST 236 — Music Theory III 2
MUST 237 — Music Theory IV 2

Program Requirements Total 48
General Electives - chosen from 300+ level 15
Minor Area - curriculum required by minor area 21

Successful completion of Private Applied Upper-Division Assessment required to register for MUSP 400 level courses.

All students take the Class Piano Proficiency Exam upon entering this program. A recommendation for Class Piano placement is given by the screening faculty. If any student is recommended for placement in any section of Class Piano other than MUSG 123 Class Piano I, they must complete the Examination(s) for Credit coordinated by the MSU Testing Center. Students successfully completing the exam will be given a passing grade of “K” for each level that they test out of.

The completion of the courses by exam will also appear on the student’s official check sheet and transcripts.

#To fulfill the MUSM Ensemble Requirements above, the student must choose the area most applicable to the primary instrument and fulfill all four credits from that area.

Components of Degree Requirement

General Education Requirements 36
Program Requirements 48
Minor Area 21
General Electives 15
Degree Requirement Total 120

Minor in Music

Program Requirements

MUSG 123 — Class Piano I
MUSG 124 — Class Piano II
MUSG 223 — Class Piano III or
MUSG 224 — Class Piano IV 2
MUSH 171 — Global Perspectives in Music 3
MUSM 3XX 4
(Choice four credits from one area:
Bands
Choirs
Trad/Guitar
Orchestras
Keyboard Ensembles
Jazz Ensembles
MUSM 200 — Student Recital (four semesters with a passing grade of “K” required) 0
MUSP 200 — Student Performance (four semesters with a passing grade of “K” required) 0
*MUSP 2XX — Private Applied 8
MUST 131 — Music Theory I 3
MUST 132 — Music Theory II 3
MUST 133 — Music Reading I 1
MUST 135 — Music Reading II 1

Program Requirements Total 48

Minor Area - curriculum required by minor area 21

Traditional Music Studies Minor

Program Requirements

The Minor in Traditional Music Studies program renders to the University community an intellectual experience as related to the creative cultural interaction in Appalachia that has produced a wealth of distinctive styles of music. Of particular focus is the dynamic exchange between Celtic and other European aesthetics.
that have affected everything from the blues to Bluegrass music. The Traditional Music Studies program addresses issues of community, style, commercialism, and revival. Some of the regionally affected genres that are examined are: 1) string band music, 2) Bluegrass, 3) blues, 4) shape-note singing, and 5) gospel. No formal musical background is necessary for enrollment in this program.

**Private Applied (10 credit hours)**
- MUSP 2XX — Private Applied Area 10

**Ensembles (Four credit hours)**
- MUSM 2XX/4XX — Ensembles 4

**Music Theory (Four credit hours)**
- MUST 103 — Practical Theory for Traditional Music 2
- MUST 104 — Traditional Vocal Harmony 2

**Music History and Literature (Three credit hours)**
- MUSH 261 — Music Listening (Folk and Country Music section) 3

**Total** 21

**Music Teachers National Association**

**Program Requirements**

In order to provide specialized musical instruction to individuals pursuing a career as full- or part-time studio teachers, MSU offers course work leading to the Music Teachers National Association (MTNA) Certificate at two levels: Associate and Professional. By offering courses in this curriculum, MSU endorses and supports a major MTNA mandate "that professional studio teaching is a worthwhile career, and as such, deserves to be accountable by a regulatory agency."

After completing the program, the candidate must present a teaching and performing demonstration before a jury chosen by the MTNA National Certificate chairperson. This program leads to MTNA professional certification. No credential is granted by MSU.

**MTNA Associate Certificate**
- MUSP 2XX/4XX — Private Applied Area+ 12
- MUST 131 — Music Theory I 3
- MUST 132 — Music Theory II 3
- MUST 133 — Music Reading I 1
- MUST 135 — Music Reading II 1
- MUSH 171 — Global Perspectives in Music 3
- MUSE 378 — Piano Pedagogy 2
- MUST 476 — Special Problems in Music 2

**Total** 27

*Enroll in the course appropriate to the results of the placement audition, Private Applied instrument area, upper-division assessment and class standing. Private Applied in the principal instrument requires a performance examination before a jury of faculty members in their principal applied area at the end of each semester.

**MTNA Professional Certificate**
- MUSP 2XX/4XX — Private Applied Area+ 24
- MUST 131 — Music Theory I 3
- MUST 132 — Music Theory II 3

**Opportunities in Theatre**

**Faculty**
G. Carlisle, N. Davis, P. Denayer, L. Morse, D. Watkins

The distinguished Department of Music, Theatre and Dance offers substantial educational programs and opportunities both on and off stage in theatrical productions. Our faculty and staff are individually and collectively committed to help students thrive and succeed. As a program accredited by the National Association of Schools of Theatre, we offer degrees in Theatre and Theatre Education, and a minor in Theatre. Our students benefit from a host of options every year with four Mainstage Productions and additional Second Stage Productions. Our students participate as actors, technicians, designers and directors. The faculty at Morehead State is committed to providing as many hands-on experiences as possible for you so that when you graduate you will have a portfolio of realized work. In addition to the productions mentioned above, MSU Theatre also produces The Little Company, a troupe that performs for elementary and high schools and conducts workshops in drama. The MSU Theatre Program is active in the Southeastern Theatre Conference and the Kennedy Center American College Theatre Festival.

**Theatre Programs Competencies**

**Students will demonstrate:**

1. A general familiarity with all aspects of theatre.
2. A proficiency in at least two specific areas of theatre production such as acting, directing, set design and construction, costume design and construction, lighting, properties, makeup, publicity, sound design, and stage movement.
3. Familiarity with significant periods and styles of dramatic literature.
4. Basic knowledge of the chronological history of theatre.

**Assessment Procedures**

Capstone Course
Bachelor of Arts Theatre Major (BA in Theatre)

Program Requirements
The theatre major will require 48 credit hours in Theatre courses. Students in this program are also required to select a minor program of study.

General Education
THEA 499C — Senior Seminar in Theatre (Capstone) 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements
The theatre major will require 48 credit hours in Theatre courses. These courses are as follows:
THEA 100 — Fundamentals of the Theatre 3
THEA 101 — Voice and Articulation 3
CMAP 166 — Media Design and Layout 3
THEA 177, 277, 377, 477 — Practicum (at least one hour at three different levels one credit hour each) 3
THEA 200 — Introduction to Dramatic Literature 3
THEA 210 — Technical Production 3
THEA 211 — Costume Construction I 3
THEA 225 — Introduction to Design 3
THEA 284 — Acting Techniques 3
THEA 380 — Play Directing 3
THEA 354 — Theatre History I 3
THEA 355 — Theatre History II 3

Core Total 36

Theatre Elective Courses
Choose two of the following for a total of six hours:
THEA 321 — Stage Lighting 3
THEA 322 — Scene Design 3
THEA 326 — Stage Costume Design 3

Choose two of the following for a total of six hours:
THEA 105 — Modern Dance Technique 3
THEA 205 — Intermediate Modern Dance 3
THEA 207 — Dance Improvisation 3
THEA 208 — Beginning Ballet 3
THEA 305 — Advanced Modern Dance 3
THEA 308 — Intermediate Ballet 3
THEA 309 — Tap Dancing 3
THEA 310 — Stage Movement 3
THEA 311 — Theatre Seminar I 3
THEA 312 — Theatre Seminar II 3
THEA 313 — Theatre Seminar III 3
THEA 314 — Acting for the Camera 3
THEA 315 — Stage Makeup 3
THEA 316 — Stage Properties 3
THEA 317 — Scene Painting 3
THEA 318 — Hip Hop and Urban Dance 3
THEA 319 — Jazz Dance 3
THEA 321 — Stage Lighting 3
THEA 322 — Scene Design 3
THEA 325 — Stage Costume History 3
THEA 326 — Stage Costume Design 3
THEA 328 — Creative Sewing for the Theatre II 3
THEA 340 — Auditioning 3
THEA 375 — Creative Dramatics 3
THEA 408 — Advanced Ballet 3
THEA 412 — Playwriting 3
THEA 413 — Advanced Play Direction 3
THEA 430 — Summer Theatre III 1-4
THEA 452 — Early Dramatic Literature 3
THEA 453 — Modern Dramatic Literature 3
THEA 455 — Dramatic Criticism 3
THEA 462 — Advanced Acting 3
THEA 463 — Advanced Costuming 3
THEA 464 — Advanced Scene Design 3
THEA 465 — Advanced Stage Lighting 3
THEA 470 — Children’s Theatre 3
THEA 484 — Styles of Acting 3

Theatre Electives Total 12

Additional Requirements:
Annual progress meeting with the faculty

Components of Degree Requirement
General Education 36
Core Requirements Total 36
Theatre Electives 12
Minor and General Electives 36

Degree Requirement Total 120

Area of Concentration in Theatre with Teaching Certification

Theatre with Teaching Certification Program Requirements
The Theatre Area with a Teaching Certification Option requires a total of 90 hours. Of these hours, 48 are theatre course requirements.

General Education
EDF 211 — Foundations of Education (SBS1) 3
EDF 211 — Human Growth & Development (SBS2) 3
THEA 499C — Senior Seminar Theatre 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Core Requirements
THEA 100 — Fundamentals of the Theatre 3
THEA 101 — Voice and Articulation 3
CMAP 166 — Media Design and Layout 3
THEA 177, 277, 377, 477 — Practicum (at least one hour at three different levels one credit hour each) 3
THEA 200 — Introduction to Dramatic Literature 3
THEA 210 — Technical Production 3
THEA 211 — Costumes Construction I 3
THEA 225 — Introduction to Design 3
THEA 380 — Acting Techniques 3
THEA 380 — Play Directing 3
THEA 354 — Theatre History I 3
THEA 355 — Theatre History II 3
THEA 284 — Acting Techniques 3
THEA 380 — Play Directing 3
THEA 354 — Theatre History I, or
THEA 355 — Theatre History II
Core Total 33

Additional Required Courses
THEA 375 — Creative Dramatics 3
THEA 470 — Children’s Theatre 3
COMM 495 — Administering the Communication Program
Choose two of the following for a total of six hours:
THEA 321 — Stage Lighting 3
THEA 322 — Scene Design 3
THEA 326 — Costume Design 3
Additional Required Courses Total 15

Supplemental Requirements (Professional Education)
EDF 207 — Foundations of Education (SBS1) 3
EDF 211 — Human Growth and Development (SBS2) 3
EDSP 230 — Education of Exceptional Children 3
Choose one of the following for three credit hours:
*EDF 311 — Learning Theories & Assessment in Education 3
EDEE 305 — Learning Theories & Practices in Early Elementary
Choose one of the following:
*EDSE 312 — Educational Methods & Technology 3
EDEL 302 — Integrating Technology into the Classroom 3
Additional Required Courses
*EDSE 483 — Class Organ & Mgt for Second Teachers 3
**EDSE 416 — Student Teaching 12
Supplemental Requirements Total (not including exchange courses) 24

Components of Degree Requirement
General Education Requirements 36
Program Requirements 48
Supplemental Requirements (Professional Education) 24
General Electives 12
Program Requirements Total 120
*Admission to TEP is required to enroll in these courses.
**Application for Clinical Practice submitted one semester in advance to Educational Service Unit.

Theatre Minor
THEA 100 — Fundamentals of the Theatre 3
THEA 200 — Introduction to Dramatic Literature 3
THEA 210 — Technical Production 3
THEA 211 — Costume Construction I 3
THEA 225 — Introduction to Design 3
THEA 284 — Acting Techniques 3
THEA 380 — Play Directing 3
Choose one of the following for a total of three credit hours:
THEA 321 — Lighting 3
THEA 322 — Scene Design 3
THEA 326 — Stage Costume Design 3
Total 24

Additional Requirements:
Annual progress meeting with the faculty

Department of Sociology, Social Work, & Criminology
Clarenda Phillips, Chair
355A Rader Hall
606-783-2656

Social Work

Faculty

Program Competencies
The purpose of the social work program competencies are to guide student development as beginning professional social workers in generalist practice, from knowledge acquisition, comprehension and application of knowledge, to analysis, synthesis, and evaluation of generalist social work practice.

Students will:
1. Identify as a professional social worker and conduct one’s self accordingly.
2. Apply social work ethical principles to guide professional practice.
3. Apply critical thinking to inform and communicate professional judgment.
4. Engage diversity and difference in practice.
5. Advance human rights and social and economic justice.
6. Engage in research informed practice and practice informed research.
7. Apply knowledge of human behavior and the social environment.
8. Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
9. Respond to contexts that shape practice.
10. Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.

Assessment Procedures
Surveys of graduates
Employer Survey

Bachelor of Social Work (BSW)
Social work is a human service profession that assists the needs of society in several areas, including gerontology, health care, mental retardation, child welfare, correctional rehabilitation, mental health, income maintenance, home health, hospice, domestic
violence, homelessness, and alcoholism/substance abuse. The BSW Program is fully accredited by the Council on Social Work Education and prepares students as generalist practitioners for entry-level professional practice with individuals, marital couples, families, small groups, organizations, practitioners, and entire communities.

Admission Requirements and Procedures

The BSW Program has a selective admission procedure.

1. Be unconditionally admitted to MSU through the University’s Office of Enrollment Services.
2. Declare social work as an area of concentration.
   a. Meet with assigned faculty advisor.
   b. Apply for Advanced Standing while in SWK 325 - Social Work Generalist Perspective
   c. Obtain and complete application. File the application, an unofficial transcript, a copy of current program evaluation, and autobiographical sketch with advisor one week prior to interview with the faculty advisor.
3. The Program Director, in collaboration with program faculty, will determine and announce each semester’s schedule for students to apply for advanced standing. The Program Director will schedule faculty conferences on individual student evaluations as needed as described in paragraph 4.
4. The student’s advisor will meet with the candidate after reviewing all of the material presented by the student and any recommendations made by other faculty. If all is in order, the faculty member will notify the social work faculty committee that the student is accepted for advanced standing. If there are any exceptions to the standard criteria, the Program Director will determine whether the candidate’s application should be reviewed by the Social Work Faculty Committee. In those cases, faculty will make one of four determinations:
   a. Approved - all admission criteria have been met and the faculty believes the student has demonstrated the values of social work.
   b. Conditional approval (probation) - one or more of the admission criteria has not been met but the faculty believes the student can complete the deficiencies within a specified time frame.
   c. Deferred - student does not meet admission criteria but will be reconsidered once all criteria are met.
   d. Denied - student does not meet admission criteria.
5. Student can meet requirements for Kentucky Board of Social Work Licensing.

Admission Criteria

Applicants to the BSW Program Advanced Standing are selected based upon the following criteria:  
1. Completion of 64 credit hours of the required pre-social work courses as listed on the curriculum sequence;
2. Completion of or enrollment in SWK 210 — Orientation to Social Work, SWK 230 — Social Welfare History and Ethics, SWK 320 — Human Behavior in the Social Environment, Conception to Young Adulthood, SWK 324 — Social Work Research, and SWK 325 — Social Work Generalist Perspective; and
3. Achievement of an overall GPA of 2.5 and grade of "C" or above in all Social Work Core courses.

General Education

SWK 499C — Senior Seminar 3

General Education Total 36

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements

SWK 210 — Orientation to Social Work 4
SWK 230 — Social Welfare History and Ethics 3
SWK 320 — Human Behavior in the Social Environment 3
Conception to Young Adulthood
SWK 321 — Human Behavior in the Social Environment 3
Middle Adulthood to Death
SWK 324 — Social Work Research 3
SWK 325 — Social Work Generalist Perspective 3
SWK 326 — Generalist Practice Lab 3
SWK 345 — Law and Social Work 3
SWK 424 — Social Work Micro Practice 3
SWK 426 — Social Work Mezzo Skills 3
SWK 430 — Social Policy and Planning 3
SWK 451 — Social Science Data Analysis 3
SWK 497 — Practicum in Social Work 8
SWK 498 — Social Work Macro Practice 3
Social Work Electives 12
Select 12 hours from the following:
SWK 300, SWK 301, SWK 306, SWK 315, SWK 330, SWK 333, SWK 334, SWK 335, SWK 340, SWK 358, SWK 360, SWK 370, SWK 380, SWK 381, SWK 399, SWK 400, SWK 416, SWK 420, SWK 435, SWK 441, SWK 445, SWK 458, CRIM 317 or CRIM 345

Program Requirements Total 60

Supplemental Requirements

SOC 374 — American Minority Relations 3
Supplemental Requirements Total 3

Components of Degree Requirement

General Education Requirement 36
Program Requirements 60
Supplemental Requirements 3
General Electives 21

Degree Requirement Total 120

Social Work Minor

The Minor in Social Work provides majors in related fields an understanding of the social work profession, an introduction to basic practice skills, and an opportunity to gain actual experience in a field setting. Students must earn a "C" or higher in all of the courses listed in order to earn a Minor in Social Work.

SWK 210 — Orientation to Social Work 4
SWK 230 — Social Welfare History and Ethics 3
SWK 310 — Field Experience in Social Work 3
SWK 333 — Beginning Skills for Human Service Professionals, or
SWK 360 — Crisis Intervention 3
Sociology & Criminology

Faculty
B. Barton, E. Biebel, E. Breschel, R. Bylund, R. Hall, C. Hardesty, R. Katz, S. Nash, C. Phillips, P. Steele (IRAPP), S. Tallichet

Program Competencies

Students will develop:
1. A working knowledge of the general concepts of sociological analysis, including exposure to selected substantive areas of sociology.
2. Skills in sociological research, including research design, data analysis, report writing, and computer literacy.
3. Reasoning skills and writing abilities so that they can apply sociological principles to their occupational roles.
4. The ability to understand themselves and their society from a general liberal arts tradition.

Assessment Procedures
Exit examination required of all majors
Survey of graduates
Senior seminar

The sociology program provides students with broad critical and analytical skills that can be applied on the individual, organizational, and societal levels. Combined with other skills and courses, a sociology major can prepare for careers in human service, planning, personnel, public relations, college teaching, and more.

Sociology majors seeking teacher certification must also complete a teaching minor. See "Teacher Education Program" and "Professional Experiences" requirements.

Program Standards
Students must earn a grade of "C" or higher in all required core courses in Sociology, and Sociology with an Area of Concentration in Criminology major, and in the Sociology and Criminology minor.

To successfully complete the Sociology and Sociology (Criminology) majors as well as the Sociology and Criminology minors, students must earn a cumulative GPA of 2.25 in all courses included in these respective programs.

Bachelor of Arts in Sociology

Sociology Major

General Education

SOC 499C — Senior Seminar
General Education Total

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements

SOC 101 — General Sociology
SOC 305 — Cultural Anthropology
Choose two of the following:
SOC 300, SOC 350, SOC 374

SOC 405 — Sociological Theory
SOC 450 — Research Methodology
SOC 451 — Social Science Data Analysis
SOC Electives - nine hours must be at the 300 level or above

Program Requirements Total

Sociology Minor

SOC 101 — General Sociology
SOC 405 — Sociological Theory
SOC 450 — Research Methodology
SOC — electives 200 level or above
SOC — electives 300 level or above

Total Hours

Components of Degree Requirement
General Education Requirement
Program Requirements
Minor
General Electives

Degree Requirement Total

Sociology with an Area of Concentration in Criminology

Program Competencies

Students will develop:
1. Knowledge of the criminal justice system, basic skills in working with the offenders, familiarity with more complex theoretical explanations of crime and delinquency, the ability to read and understand criminological research methods and findings of such research, and to understand the effects of social institutions, social policies and social and economic inequality on crime and criminal justice. International crime will also be introduced to students.
2. A working knowledge of the general concepts of sociological analysis, including exposure to selected substantive areas of sociology.
3. Skills in sociological research and reasoning, including research design, data analysis, report writing, and computer literacy.
4. Reading skills and writing abilities so that they can apply sociological principles to criminal justice roles and explanations of criminal behavior.
5. Applied skills through practicum experiences.

The Criminology Program prepares students for a wide range of career opportunities in local, state, and federal criminal justice agencies. Specific examples include correctional officer, probation and parole officer, counselor, case manager, police officer, youth officer, and others.

General Education
CRIM 499C — Senior Criminology Capstone
General Education Total

Refer to the General Education section for a complete listing of general education requirements for the University.
Prerequisites for 499C include CRIM 306 or CRIM 401, SOC
450, SOC 451, six additional hours of Criminology, and senior standing or consent of instructor.

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM/SOC 210</td>
<td>The Sociology of Deviance</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 250</td>
<td>Introduction to the Criminal Justice System</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 300</td>
<td>The Criminogenic Family</td>
<td>3</td>
</tr>
<tr>
<td>CRIM/SOC 306</td>
<td>Juvenile Delinquency or</td>
<td>3</td>
</tr>
<tr>
<td>CRIM/SOC 401</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 380</td>
<td>Race, Class, Gender, and Crime</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 416</td>
<td>Working with Offenders</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 490</td>
<td>Practicum in Criminology</td>
<td>5</td>
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<tr>
<td>CRIM 491</td>
<td>Senior Seminar (to be taken with CRIM 490)</td>
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</tr>
<tr>
<td>SOC 101</td>
<td>General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 405</td>
<td>Sociological Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 450</td>
<td>Research Methodology</td>
<td>3</td>
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<tr>
<td>SOC 451</td>
<td>Social Science Data Analysis</td>
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<tr>
<td>CRIM Electives</td>
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Program Requirements Total 45

Components of Degree Requirement

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<tr>
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<tr>
<td>General Education Requirement</td>
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<td>Program Requirements</td>
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<td>General Electives</td>
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Degree Requirement Total 120

Criminology Minor

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CRIM/SOC 210</td>
<td>The Sociology of Deviance</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 250</td>
<td>Introduction to the Criminal Justice System</td>
<td>3</td>
</tr>
<tr>
<td>CRIM/SOC 306</td>
<td>Juvenile Delinquency or</td>
<td>3</td>
</tr>
<tr>
<td>CRIM/SOC 401</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>Advanced electives for minor</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 24

Sociology-Regional Analysis Emphasis Program

Program Competencies

Students will:

1. Develop a working knowledge of the general concepts of sociological analysis, including exposure to selected substantive areas of sociology.
2. Learn skills in sociological research including research design, data analysis, report writing, and computer literacy.
3. Establish reasoning skills and writing abilities so they can apply sociological principles to their occupational roles.
4. Develop the ability to understand themselves and their society from a general liberal tradition.
5. Develop applied skills through practicum experiences.
6. Have the ability to carry out studies in their areas of expertise that include a significant analysis of regional resources and issues.
7. Possess the ability to present research and policy reports that are comprehensible to audiences of various public policymakers.
8. Demonstrate the ability to interpret the output of regional resource analysis and their potential uses in formulating public policy.

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAPP 201</td>
<td>Society, Nature, &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 202</td>
<td>Basic Computer Tech in Reg. Analysis</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 300</td>
<td>Seminar in Regional Issues I</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 350</td>
<td>Practicing Regional Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 450</td>
<td>Practicing Regional Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 490</td>
<td>Seminar in Regional Issues II</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>General Sociology</td>
<td>3</td>
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<tr>
<td>SOC 300</td>
<td>Social Stratification</td>
<td>3</td>
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<tr>
<td>SOC 305</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 350</td>
<td>The Human Exp. of Sex and Gender or</td>
<td>3</td>
</tr>
<tr>
<td>SOC 374</td>
<td>American Minority Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOC 405</td>
<td>Sociological Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 450</td>
<td>Research Methodology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 451</td>
<td>Social Science Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SOC 499C</td>
<td>Senior Seminar</td>
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<td>SOC Electives</td>
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Total Hours 48

Supplemental Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ECON 401</td>
<td>Environmental Economics or</td>
<td>3</td>
</tr>
<tr>
<td>GEO 349</td>
<td>Introduction to GIS/Cartography</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 324</td>
<td>Environmental Law and Policy</td>
<td>3</td>
</tr>
</tbody>
</table>
College of Science & Technology at a Glance

Roger McNeil, Dean
246 Reed Hall
606-783-2023
E-mail: r.mcneil@moreheadstate.edu

Department of Agricultural Sciences
BS - Agricultural Science with options
Pre-Forestry
Pre-Veterinary Medicine
AAS - Veterinary Technology
BS - Veterinary Technology

Department of Biology and Chemistry
BS - Biology with options
BS - Biological Science Teaching
BS - Chemistry
Pre-Chiropractic
Pre-Dentistry
Pre-Medical Technology
Pre-Medicine
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
Pre-Podiatric Medicine

Department of Earth & Space Science
BS - Earth Systems Science
BS - Physics with option in Astrophysics
BS - Space Science

Department of Applied Engineering and Technology
BS – Engineering Management
BS - Engineering Technology
AAS - Industrial Technology with options
BS - Industrial Technology with options
BS - Industrial Education with options
BS - Technology Management

Department of Mathematics, Computer Science and Physics
BS - Mathematics
BS - Computer Science
BS - Physics
Pre-Engineering

Department of Psychology
BS - Psychology
BA - Psychology

School of Health Sciences
Department of Imaging Sciences
AAS - Radiologic Science
BS - Imaging Sciences with options
BS - Computed Tomography/Magnetic Resonance Program

BS - Diagnostic Medical Sonography Program
BS - Leadership in Medical Imaging Program (online)

Department of Health, Wellness, & Human Performance
BA - Physical Education P-12
BS - Exercise Science
BA - Health and Physical Education P-12
BA - Health P-12
BA - Health Promotion
AAS - Respiratory Care

Department of Nursing
AAS - Associate Degree Nursing
BSN - Baccalaureate Nursing

Department of Agricultural Sciences
325 Reed Hall
606-783-2662

Agricultural Sciences Degrees

Faculty

Program Competencies
Students graduating from the Bachelor of Science degree program should possess the following:
1. Written, oral, and interpersonal communication skills; and basic math skills that will allow the individual to collect, analyze, interpret, and present information that is used within the agricultural industry.
2. An understanding of the basic concepts of the physical and biological sciences and how these sciences are applicable to the field of agriculture.
3. An understanding of the importance of the arts, humanities, social and behavioral sciences, and health sciences to humankind.
4. An understanding and literacy of all disciplines of agriculture especially to include the disciplines of animal science, agronomy, soils, horticulture, agricultural mechanics, pest management, agricultural economics, and farm management.

Additional Competencies for Specific Options

Agribusiness Option
An understanding of the principles of accounting and how they are used in agribusiness.

Agricultural Education Option
1. The ability to use effective planning in course organization in agricultural education.
2. The ability to plan daily instructional programs in agricultural education.
3. An understanding of occupational experience programs and their role in agricultural education.
4. An understanding of FFA and SAE and their role in agricultural education.
5. An understanding of effective management of instructional programs in agricultural education.

**Agronomy Option**

An understanding of and the ability to apply the principles of soil conservation and weed science to crop production and also an understanding of how certain crops are utilized by farm animals.

**Animal Science Option**

The ability to demonstrate techniques used in the evaluation and feeding of farm livestock.

**Golf Course Management Option**

1. An understanding of the selection, establishment, and maintenance of plants used on the golf course.
2. An understanding of the business, horticultural, and recreational aspects of golf course management.

**Horticulture Option**

An understanding of the basic principles involved in the production and propagation of horticultural plants.

**Assessment Procedures**

- Exit examination
- Surveys of graduating students, alumni, advisory groups, and employers
- Teacher certification examination for Agricultural Education

**Bachelor of Science**

General Education Requirements 37

*See General Education requirements for the University.*

**Area of Concentration**

To complete an area of concentration in Agricultural Sciences, the student must complete the Agricultural Sciences core requirements plus one of the following options: Agricultural Education, Agribusiness, Agronomy, Animal Science, General Agriculture, Golf Course Management, Horticulture, or Veterinary Science. General course electives may also be taken in agriculture and related fields by students wishing greater depth in an agricultural field.

**Agricultural Sciences Core Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 101</td>
<td>Orientation to Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>AGR 102</td>
<td>Agricultural Experience</td>
<td>2</td>
</tr>
<tr>
<td>AGR 133</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>AGR 180</td>
<td>Introduction to Field Crops or</td>
<td>3</td>
</tr>
<tr>
<td>AGR 143</td>
<td>Anatomy &amp; Physiology of Livestock</td>
<td>3</td>
</tr>
<tr>
<td>AGR 204</td>
<td>World Food</td>
<td>3</td>
</tr>
<tr>
<td>AGR 211</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>AGR 215</td>
<td>Horticultural Science</td>
<td>3</td>
</tr>
<tr>
<td>AGR 233</td>
<td>Animal Diseases and Parasites</td>
<td>3</td>
</tr>
<tr>
<td>AGR 251</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>AGR 243</td>
<td>Equine Health and Disease</td>
<td>3</td>
</tr>
<tr>
<td>AGR 261</td>
<td>Information Acquisition and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>AGR 300</td>
<td>Pest Management or</td>
<td>3</td>
</tr>
<tr>
<td>AGR 316</td>
<td>Feeds and Feeding</td>
<td>3</td>
</tr>
<tr>
<td>AGR 301</td>
<td>Farm Management</td>
<td>3</td>
</tr>
<tr>
<td>AGR 402</td>
<td>Advanced Agricultural Experience or</td>
<td>3</td>
</tr>
<tr>
<td>AGR 439</td>
<td>Cooperative Education</td>
<td>2</td>
</tr>
<tr>
<td>AGR 499C</td>
<td>Senior Seminar in Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>Survey of Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 36

*Students may apply no more than a maximum of 11 credit hours from AGR 235, 402, 476, or cooperative education courses that will count as credit toward a degree.

**Counted as the capstone course.**

**Degree Requirements**

General Education 37

Program Requirements 36

Prerequisites, Supplements, Special Electives 6

Minor 21

General Electives 20

**Total Requirements** 120

The specified course requirements must be taken in one of the following Agricultural Sciences options:

**Agribusiness Option**

Students who select this option must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of requirements and electives, with advisor’s approval.

**General Education Requirements**

The following specific General Education courses must be completed:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>Survey of Chemistry or</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>Principles of Chemistry I (NSC2)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 131</td>
<td>Mathematical Reasoning and Problem Solving or MATH 135 — Mathematics for Technical Students</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Capstone 3

**General Education Total** 37

*Refer to the General Education section for a complete listing of general education requirements for the University.*

For the Agribusiness option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

**Agricultural Sciences Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 101</td>
<td>Orientation to Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>AGR 102</td>
<td>Agricultural Experience</td>
<td>2</td>
</tr>
<tr>
<td>AGR 133</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>AGR 133</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>AGR 143</td>
<td>Anatomy and Physiology of Livestock</td>
<td>3</td>
</tr>
<tr>
<td>AGR 180</td>
<td>Introduction to Field Crops</td>
<td>3</td>
</tr>
<tr>
<td>AGR 204</td>
<td>World Food</td>
<td>3</td>
</tr>
<tr>
<td>AGR 211</td>
<td>Soils</td>
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</tr>
<tr>
<td>AGR 215</td>
<td>Horticultural Science</td>
<td>3</td>
</tr>
<tr>
<td>AGR 233</td>
<td>Animal Diseases and Parasites</td>
<td>3</td>
</tr>
<tr>
<td>AGR 251</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>
AGR 215 — Horticultural Science or 3
AGR 233 — Animal Disease and Parasites 3
AGR 251 — Introduction to Agricultural Mechanics or 3
AGR 243 — Aquaculture and Disease 3
AGR 261 — Information Acquisition and Analysis 3
AGR 300 — Pest Management or 3
AGR 316 — Feeds and Feeding 3
AGR 402 — Advanced Agricultural Experience or 2
AGR 339 — Cooperative Education or 3
AGR 439 — Cooperative Education 3
CHEM 201 — Survey of Organic Chemistry or 4
CHEM 112 — Principles of Chemistry II

Agricultural Sciences Core Total 36

Agribusiness Option Requirements
ACCT 281 — Principles of Financial Accounting 3
Advanced Electives (below) 21
Option Requirements Total 24
An additional 21 hours from the following groups, with courses from at least three groups, must be completed:

Group A
AGR 302 — Agriculture Finance 3
FIN 252 — Mathematics of Finance 3
FIN 264 — Personal Finance 3
FIN 342 — Money and Banking 3
FIN 420 — Financial Markets and Institutions 3

Group B
MNGT 301 — Principles of Management 3
MNGT 311 — Human Resource Management 3

Group C
AGR 305 — Marketing of Farm Products 3
MKT 304 — Marketing 3
MKT 350 — Professional Selling 3
MKT 354 — Consumer Behavior 3
MKT 453 — Marketing Planning and Strategies 3

Group D
MNGT 261 — The Legal Environment of Business Organizations 3
MNGT 362 — The Legal Environment and Business Practices 3

Group E
ACCT 282 — Principles of Managerial Accounting 3
ACCT 387 — Income Tax 3
AGR 303 — Land Economics 3

Components of Degree Requirement
General Education (Core, Distribution, Capstone) 37
Program Requirements 36
Prerequisites, Supplements, Special Electives 24
General Electives 23
Total Hours 120

Agriculture Education Option
This area of concentration is designed and approved for students who wish to teach agriculture education in the public schools in Kentucky or are interested in Cooperative Extension.

Students must complete the required core courses in the area of concentration in agricultural science and 44 semester hours of requirements and electives, with advisor’s approval.

General Education Requirements
The following specific general education courses must be completed:
CHEM 101 — Survey of Chemistry or 4
CHEM 111 — Principles of Chemistry I (NSC2) 3
MATH 131 — Math. Reasoning and Problem Solving or 3
MATH 135 — Mathematics for Technical Students (or higher) 3
General Education Capstone 3

General Education Total 37
Refer to the General Education section for a complete listing of general education requirements for the University.

Agricultural Sciences Core
For the Agriculture Education option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:
AGR 101 — Orientation to Agriculture 1
AGR 102 — Agricultural Experience 2
AGR 133 — Introduction to Animal Science 3
AGR 180 — Introduction to Field Crops 3
AGR 204 — World Food 3
AGR 211 — Soils 3
AGR 215 — Horticultural Science 3
AGR 251 — Introduction to Agricultural Mechanics 3
AGR 261 — Information Acquisition and Analysis 3
AGR 300 — Pest Management 3
AGR 301 — Farm Management 3
AGR 402 — Advanced Agricultural Experience or 2
AGR 339 — Cooperative Education or 3
AGR 439 — Cooperative Education 3
CHEM 201 — Survey of Organic Chemistry or 4
CHEM 112 — Principles of Chemistry II

Agricultural Sciences Core 36

Option Requirements of Agricultural Education

Agriculture Courses
Approved Agricultural Mechanics Elective 3
Approved Animal Science Elective 3
Approved Soil Science Elective 3
Approved Agricultural Electives 6
Total 15

Professional Education Courses:
CTE 207 — Foundations of Vocational Education 3
EDF 211 — Human Growth and Development 3
EDSP 230 — Teaching the Exceptional Student 3
CTE 388 — Methods of Curriculum Development 3

...
Components of Degree Requirement
General Education (Core, Distribution, Capstone) 37
Program Requirements 36
Prerequisites, Supplements, Special Electives (Teacher Education Program) 44
General Electives 3
Total Hours 120

Teacher Certification
Students seeking teacher certification must apply for and be admitted to the TEP. Students must have an overall GPA standing of 2.5 in area of concentration courses before they will be permitted to take agricultural education courses. Students must be approved by the agricultural staff and recommended for certification.

Agronomy Option
Students must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of requirements and electives, with advisor’s approval.

General Education Requirements
The following specific general education courses must be completed:
CHEM 101 — Survey of Chemistry or 4
CHEM 111 — Principles of Chemistry I (NSC2)
MATH 131 — Math. Reasoning and Problem Solving or 3
MATH 135 — Mathematics for Technical Students (or higher)
General Education Capstone 3

General Education Total 37
Refer to the General Education section for a complete listing of general education requirements for the University.

For the Agronomy option, the student must complete the Agricultural Science core, where choices exist, the following core courses must be taken:

Agricultural Sciences Core
AGR 101 — Orientation to Agriculture 1
AGR 102 — Agricultural Experience 2
AGR 133 — Introduction to Animal Science 3
AGR 180 — Introduction to Field Crops 3
AGR 204 — World Food 3
AGR 211 — Soils 3
AGR 215 — Horticulture Science 3
AGR 251 — Introduction to Agricultural Mechanics 3
AGR 261 — Information Acquisition and Analysis 3
AGR 300 — Pest Management 3
AGR 301 — Farm Management 3
AGR 402 — Advanced Agricultural Experience or 2
AGR 339 — Cooperative Education 4
AGR 439 — Cooperative Education

Total Hours 120

Agronomy Option Requirements
AGR 308 — Weed Science 3
AGR 311 — Soil Conversation 3
AGR 316 — Feeds and Feeding 3

An additional 15 semester hours must be completed from the following courses, with approval of advisor:
AGR 185 — Current Food and Energy Issues 3
AGR 205 — Farm Records 3
AGR 303 — Land Economics 3
AGR 312 — Soil Fertility and Fertilizers 3
AGR 314 — Plant Propagation 3
AGR 319 — Herbs 3
AGR 320 — Principles of Vegetable Production 3
AGR 325 — Turf Management 3
AGR 350 — Farm Power and Machinery Management 3
AGR 384 — Forage Crops 3
BIOL 215 — General Botany 4
BIOL 334 — Entomology 3
BIOL 426 — Plant Physiology 3
BIOL 449 — Plant Anatomy 3
CHEM 326 — Organic Chemistry I 3

Agronomy Option Requirements Total 24

Components of Degree Requirement
General Education (Core, Distribution, Capstone) 37
Program Requirements 36
Prerequisites, Supplements, Special Electives 24
General Electives 23
Total Hours 120

Animal Science Option
The Animal Science option is designed to prepare the graduate for a career in the animal agriculture industry and/or admission to a graduate program in Animal Science. As the admission requirements for each graduate program varies, it is essential to work closely with an animal science advisor to assure that the appropriate courses are taken. Completion of this degree option does not guarantee admission to a graduate program.

The following general education courses are required by the Animal Science option:

General Education
CHEM 101 — Survey of Chemistry or 4
CHEM 111 — Principles of Chemistry I (NSC2)
MATH 131 — Mathematical Reasoning and Problem Solving or MATH 135 — Mathematics for Technical Students

General Education Total 37
Refer to the General Education section for a complete listing of requirements for the University.
For the Animal Science option, the student must complete 12 hours of option requirements and 12 hours of option electives.

### General Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td>4</td>
</tr>
</tbody>
</table>

Refer to the General Education section for a complete listing of general education requirements for the University.

For the Equine Science option, the student must complete six hours of approved courses. Where choices exist, the following core courses must be taken:

### Agricultural Science Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 101</td>
<td>Orientation to Agriculture</td>
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<td>AGR 102</td>
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<td>AGR 143</td>
<td>Anatomy and Physiology of Livestock</td>
</tr>
<tr>
<td>AGR 204</td>
<td>World Food</td>
</tr>
<tr>
<td>AGR 211</td>
<td>Soils</td>
</tr>
<tr>
<td>AGR 233</td>
<td>Animal Diseases and Parasites</td>
</tr>
<tr>
<td>AGR 243</td>
<td>Equine Health and Disease</td>
</tr>
<tr>
<td>AGR 261</td>
<td>Information Acquisition and Analysis</td>
</tr>
<tr>
<td>AGR 301</td>
<td>Farm Management</td>
</tr>
<tr>
<td>AGR 316</td>
<td>Feeds and Feeding</td>
</tr>
<tr>
<td>AGR 402</td>
<td>Advanced Agricultural Experience or</td>
</tr>
<tr>
<td>AGR 339</td>
<td>Cooperative Education or</td>
</tr>
<tr>
<td>AGR 439</td>
<td>Cooperative Education</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>Survey of Organic Chemistry or</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
</tr>
</tbody>
</table>

### Agricultural Sciences Core Total

Total: 36 hours

### Animal Science Option Requirements Total

Total: 24 hours

### Components of Degree Requirement

- **General Education**: 37 hours
- **Program Requirements**: 36 hours
- **Prerequisites, Supplements, Special Electives**: 24 hours
- **General Electives**: 23 hours

### Total Hours Required

Total: 120 hours

The Equine Science option is designed to prepare the graduate for a career in the equine industry and/or admission to a graduate program in Equine Science. As the admission requirements for each graduate program vary, it is essential to work closely with an Equine Science advisor to assure that the appropriate courses are taken. Completion of this degree option does not guarantee admission to a graduate program.

Additional hours of approved courses are needed to complete MSU’s General Education program. These should be selected in consultation with an Equine Science advisor.

### General Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>Survey of Chemistry or</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>Principles of Chemistry I (NSC2)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 131</td>
<td>Mathematical Reasoning and Problem</td>
<td>3</td>
</tr>
<tr>
<td>SOLVING</td>
<td>Mathematics for Technical Students</td>
<td>3</td>
</tr>
<tr>
<td>AGR 499C</td>
<td>Senior Seminar in Agriculture</td>
<td>3</td>
</tr>
</tbody>
</table>

### General Education Total

Total: 37 hours

For the Equine Science option, the student must complete six hours of option requirements, and 18 hours of option electives.

### Equine Science Option Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 222</td>
<td>Livestock Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>AGR 342</td>
<td>Horse Production</td>
<td>3</td>
</tr>
<tr>
<td>AGR 233</td>
<td>Animal Disease and Parasites</td>
<td>3</td>
</tr>
<tr>
<td>AGR 243</td>
<td>Equine Health and Disease</td>
<td>3</td>
</tr>
<tr>
<td>AGR 261</td>
<td>Information Acquisition and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>AGR 301</td>
<td>Farm Management</td>
<td>3</td>
</tr>
<tr>
<td>AGR 316</td>
<td>Feeds and Feeding</td>
<td>3</td>
</tr>
<tr>
<td>AGR 402</td>
<td>Advanced Agricultural Experience or</td>
<td>2</td>
</tr>
<tr>
<td>AGR 339</td>
<td>Cooperative Education or</td>
<td>3</td>
</tr>
<tr>
<td>AGR 439</td>
<td>Cooperative Education</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>Survey of Organic Chemistry or</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td>3</td>
</tr>
</tbody>
</table>

### Equine Science Option Requirements Total

Total: 36 hours

### Option Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 306</td>
<td>Principles of Epidemiology in Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>AGR 310</td>
<td>Stocker and Feedlot Cattle Management</td>
<td>3</td>
</tr>
<tr>
<td>AGR 336</td>
<td>Dairy Production</td>
<td>3</td>
</tr>
<tr>
<td>AGR 337</td>
<td>Poultry Production</td>
<td>3</td>
</tr>
<tr>
<td>AGR 338</td>
<td>Livestock Judging</td>
<td>3</td>
</tr>
<tr>
<td>AGR 342</td>
<td>Horse Production</td>
<td>3</td>
</tr>
<tr>
<td>AGR 343</td>
<td>Beef Production</td>
<td>3</td>
</tr>
<tr>
<td>AGR 344</td>
<td>Swine Production</td>
<td>3</td>
</tr>
<tr>
<td>AGR 345</td>
<td>Sheep Production</td>
<td>3</td>
</tr>
<tr>
<td>AGR 380</td>
<td>Equine Management</td>
<td>3</td>
</tr>
<tr>
<td>AGR 410</td>
<td>Principles of Meat Science</td>
<td>3</td>
</tr>
<tr>
<td>AGR 480</td>
<td>Equine Breeding and Reproduction</td>
<td>3</td>
</tr>
<tr>
<td>AGR 415</td>
<td>Animal Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

### Agricultural Sciences Core Total

Total: 36 hours

For the Equine Science option, the student must complete six hours of option requirements, and 18 hours of option electives.

### Equine Science Option Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 245</td>
<td>Horseshoeing</td>
<td>3</td>
</tr>
<tr>
<td>AGR 306</td>
<td>Principles of Epidemiology in Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>AGR 329</td>
<td>Advanced Stock Seat Horsemanship</td>
<td>3</td>
</tr>
<tr>
<td>AGR 330</td>
<td>Livestock Improvement</td>
<td>3</td>
</tr>
<tr>
<td>AGR 332</td>
<td>Advanced Saddle Seat Horsemanship</td>
<td>3</td>
</tr>
<tr>
<td>AGR 333</td>
<td>Advanced Hunt Seat Horsemanship</td>
<td>3</td>
</tr>
<tr>
<td>AGR 335</td>
<td>Equitation Teaching</td>
<td>3</td>
</tr>
<tr>
<td>AGR 338</td>
<td>Livestock Judging</td>
<td>3</td>
</tr>
<tr>
<td>AGR 380</td>
<td>Equine Management</td>
<td>3</td>
</tr>
</tbody>
</table>

### Option Electives

Total: 18 hours
AGR 480 — Equine Breeding and Reproduction  3
AGR 415 — Animal Nutrition  3

**Equine Science Supplemental Courses Total**  24

An additional 23 hours of electives must be completed; these may be chosen after consultation with the advisor.

**Components of Degree Requirement**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education (Core, Distribution, Capstone)</td>
<td>37</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>36</td>
</tr>
<tr>
<td>Prerequisites, Supplements, Special Electives</td>
<td>24</td>
</tr>
<tr>
<td>General Electives</td>
<td>23</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>120</td>
</tr>
</tbody>
</table>

**General Agriculture Option**

Students must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of approved electives from the general agriculture option.

**General Education Requirements**

The following specific general education courses must be completed:

- CHEM 101 — Survey of Chemistry or  4
- CHEM 111 — Principles of Chemistry I (NSC2)  3
- MATH 131 — Mathematical Reasoning and Problem  3
- Solving or MATH 135 — Mathematics for Technical Students (or higher)  3
- General Education Capstone  3

**General Education Total**  37

*Refer to the General Education section for a complete listing of general education requirements for the University.*

For the General Agriculture option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

**Agricultural Sciences Core Courses**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR 101</td>
<td>Orientation to Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>AGR 102</td>
<td>Agricultural Experience</td>
<td>2</td>
</tr>
<tr>
<td>AGR 133</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>AGR 180</td>
<td>Introduction to Field Crops</td>
<td>3</td>
</tr>
<tr>
<td>AGR 204</td>
<td>World Food</td>
<td>3</td>
</tr>
<tr>
<td>AGR 211</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>AGR 215</td>
<td>Horticultural Science</td>
<td>3</td>
</tr>
<tr>
<td>AGR 251</td>
<td>Introduction to Agricultural Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>AGR 261</td>
<td>Information Acquisition and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>AGR 300</td>
<td>Pest Management</td>
<td>3</td>
</tr>
<tr>
<td>AGR 301</td>
<td>Farm Management</td>
<td>3</td>
</tr>
<tr>
<td>AGR 402</td>
<td>Advanced Agricultural Experience or Approved Cooperative Education</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>Survey of Organic Chemistry or</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td></td>
</tr>
</tbody>
</table>

**General Agricultural Core Requirements Total**  36

The minimum number of semester hours for each of the following six fields must be completed:

**Agriculture Economics**  3
Golf Course Management Option

Students who select this option must complete the required core courses in the area of concentration in agricultural science and 24 semester hours of requirements, with advisor's approval.

General Education Requirements

The following specific general education courses must be completed:

CHEM 101 — Survey of Chemistry or CHEM 111 — Principles of Chemistry I (NSC2) 4
CHEM 111 — Principles of Chemistry I (NSC2) 4
MATH 131 — Mathematical Reasoning and Problem Solving 3
Solving or MATH 135 — Mathematics for Technical Students 3
General Education Capstone 3

General Education Total Hours 37

Refer to the General Education section for a complete listing of general education requirements.

Agricultural Sciences Core

For the Golf Course Management option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 101 — Orientation to Agriculture 1
AGR 102 — Agricultural Experience 2
AGR 133 — Introduction to Animal Science 3
AGR 180 — Introduction to Field Crops 3
AGR 204 — World Food 3
AGR 211 — Soils 3
AGR 215 — Horticultural Science 3
AGR 251 — Introduction to Agricultural Mechanics 3
AGR 261 — Information Acquisition and Analysis 3
AGR 300 — Pest Management 3
AGR 301 — Farm Management 3
AGR 402 — Advanced Agricultural Experience or at least 2
AGR 339 — Cooperative Education or at least 3
AGR 439 — Cooperative Education 3
CHEM 201 — Survey of Organic Chemistry or at least 4
CHEM 261 — Survey of Organic Chemistry or at least 4
CHEM 101 — Survey of Chemistry or at least 4
CHEM 111 — Principles of Chemistry I 3

Agricultural Core Requirements Total 36

Golf Course Management Option Required Courses

AGR 212 — Landscape Plants 3
AGR 308 — Weed Science 3
AGR 318 — Landscape Maintenance 3
AGR 325 — Turf Management 3
MNGT 301 — Principles of Management 3
MKT 304 — Marketing or Consumer Behavior 3
PHED 100 — Golf 1
SPMT 307 — Sport Marketing 3
SPMT 402 — Planning, Designing, and Managing Sports and Physical Activity Facilities 3

Option Total Hours 25

Components of Degree Requirement

General Education (Core, Distribution, Capstone) 37

Program Requirements 36
Prerequisites, Supplements, Special Electives 25
General Electives 22
Total Hours 120

Horticulture Option

Students must complete the required core courses in the area of concentration in agricultural and 24 semester hours of requirements and electives.

General Education Requirements

The following specific general education courses must be completed:

CHEM 101 — Survey of Chemistry or CHEM 111 — Principles of Chemistry I (NSC2) 4
CHEM 111 — Principles of Chemistry I (NSC2) 4
MATH 131 — Mathematical Reasoning and Prob. Solving or MATH 135 — Mathematics for Technical Students 3
General Education Capstone 3

Core Requirements 37

Refer to the General Education section for a complete listing of general education requirements for the University.

Agricultural Sciences Core

For the Horticulture option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

AGR 101 — Orientation to Agriculture 1
AGR 102 — Agricultural Experience 2
AGR 133 — Introduction to Animal Science 3
AGR 180 — Introduction to Field Crops 3
AGR 204 — World Food 3
AGR 211 — Soils 3
AGR 215 — Horticultural Science 3
AGR 251 — Introduction to Agricultural Mechanics 3
AGR 261 — Information Acquisition and Analysis 3
AGR 300 — Pest Management 3
AGR 301 — Farm Management 3
AGR 402 — Advanced Agricultural Experience or at least 2
AGR 339 — Cooperative Education or at least 3
AGR 439 — Cooperative Education 3
CHEM 201 — Survey of Organic Chemistry or at least 4
CHEM 101 — Survey of Chemistry or at least 4
CHEM 111 — Principles of Chemistry I 3

Agricultural Sciences Core Total 36

Horticulture Option Requirements

AGR 314 — Plant Propagation 3

An additional 21 semester hours of advanced electives must be selected from the following courses, with approval of advisor:

AGR 185 — Current Food and Energy Issues 3
AGR 212 — Landscape Plants 3
AGR 213 — Landscape Design 3
AGR 224 — Greenhouse Operations 3
AGR 308 — Weed Science 3
AGR 315 — Fruit Production 3
AGR 317 — Floral Design 3
AGR 318 — Landscape Maintenance 3
AGR 319 — Herbs 3
AGR 320 — Principles of Vegetable Production 3
AGR 323 — Interior Landscaping 3
AGR 324 — Greenhouse Structures 3
AGR 325 — Turf Management 3
AGR 326 — Nursery Management 3
AGR 327 — Advanced Landscape Design 3
AGR 328 — Floral Crop Production 3
BIOL 318 — Local Flora 3

**Horticulture Option Requirements Total** 24

**Components of Degree Requirement**

General Education (Core, Distribution, Capstone) 37
Program Requirements 36
Prerequisites, Supplements, Special Electives (Teacher Education Program) 24
General Electives 23

**Total Hours** 120

**Veterinary Science Option**

The Veterinary Science option is designed to prepare the candidate for admission to a College of Veterinary Medicine (CVM). As the admission requirements for CVMs vary, it is essential to work closely with a pre-veterinary advisor to assure that the appropriate courses are taken. Completion of this degree option does not guarantee admission to a CVM.

There are no special admission requirements for this degree option. It is not restricted to pre-veterinary students, but is open to anyone interested in pursuing an Agricultural Sciences degree option in Veterinary Science. However, a prospective applicant to a CVM must earn excellent grades to be a competitive candidate. It is therefore recommended that pre-veterinary students possess above-average academic skills (ACT composite and math scores of 22, or higher) and a strong aptitude for science courses.

**General Education Total** 38-39

The following general education courses are required by the Veterinary Science option:

- BIOL 171 — Principles of Biology (NSC1) 4
- CHEM 111 — Principles of Chemistry I (NSC2) 4
- MATH 174 — Pre-Calculus Mathematics or 3-4
- MATH 175 — Calculus I 3
- General Education Capstone 3

Refer to the General Education section for a complete listing of general education requirements for the University.

*Applicants to Auburn CVM must take Pre-Calculus Mathematics (MATH 174) unless they have a bachelor's degree prior to matriculation.

**Elective General Education hours** 24-25

An additional 23 hours of approved courses are needed to complete MSU’s General Education program. These should be selected in consultation with a pre-veterinary advisor on the basis of the CVMs to which applicant may apply. For example, Auburn University specifically requires fine arts, history and literature; whereas Ohio State University does not require specific social science and humanities courses. It is important to recognize that Auburn University considers history to be social science, not a humanities subject.

**Agricultural Sciences Core**

For the Veterinary Science option, the student must complete the Agricultural Sciences core. Where choices exist, the following core courses must be taken:

- AGR 101 — Orientation to Agriculture 1
- AGR 102 — Agricultural Experience 2
- AGR 133 — Introduction to Animal Science 3
- AGR 143 — Anatomy & Physiology of Livestock or 3
- VET 108 — Veterinary Clinical Anatomy 3
- AGR 204 — World Food 3
- AGR 211 — Soils 3
- AGR 233 — Animal Diseases and Parasites 3
- AGR 243 — Equine Health and Disease 3
- AGR 261 — Information Acquisition and Analysis 3
- AGR 301 — Farm Management, or 3
- VET 401 — Veterinary Practice Management 3
- AGR 316 — Feeds and Feeding 3
- AGR 402 — Advanced Agriculture Experience or 2
- AGR 339 — Cooperative Education or 4
- AGR 439 — Cooperative Education 4
- CHEM 112 — Principles of Chemistry II 3

**Agricultural Sciences Core Total** 36

**Veterinary Science Option Requirements**

**Option Requirements (6)**

- AGR 415 — Animal Nutrition 3
- AGR 480 — Equine Breeding and Reproduction 3

**Required Supplemental hours (20)**

- BIOL 210 — General Zoology 4
- CHEM 326 — Organic Chemistry I 4
- CHEM 327 — Organic Chemistry II 4
- PHYS 201 — Elementary Physics I 3
- PHYS 201A — Elementary Physics I Laboratory 1
- PHYS 202 — Elementary Physics II 3
- PHYS 202A — Elementary Physics II Laboratory 1

**Elective Supplemental hours (15)**

An additional 15 hours of supplemental electives (300 level or higher science courses) approved by the student’s pre-veterinary advisor are required. These should be selected on the basis of the CVMs to which the applicant may apply. Suggested choices include, but are not limited to:

- BIOL 301 — Fundamentals of Biochemistry 4
- BIOL 304 — Genetics 3
- BIOL 317 — Principles of Microbiology 4
- BIOL 337 — Comparative Anatomy 3
- BIOL 338 — Developmental Biology 3
- BIOL 380 — Cell Biology 3
- BIOL 424 — Immunology 3
- BIOL 425 — Animal Physiology 3
- CHEM 360 — Analytical Chemistry 3

*Required by Ohio State University, CVM
Option Electives (12)
AGR 245 — Horseshoeing 3
AGR 306 — Principles of Epidemiology in Agriculture 3
AGR 310 — Stocker and Feedlot Cattle Management 3
AGR 336 — Dairy Production 3
AGR 337 — Poultry Production 3
AGR 338 — Livestock Judging 3
AGR 342 — Horse Production 3
AGR 343 — Beef Production 3
AGR 344 — Swine Production 3
AGR 345 — Sheep Production 3
AGR 380 — Equine Management 3
AGR 410 — Principles of Meat Science 3
VET 370 — Veterinary Infectious Diseases 3

Components of Degree Requirement
General Education (Core, Distribution, Capstone) 38-39
Program Requirements (Core and Option) 42
Prerequisites, Supplements, Special Electives 47
Total Hours 127-128

Agriculture Major

The student must complete the core course requirements listed under the area of concentration in agricultural science, six additional semester hours of approved agriculture electives, and a major or minor selected in another field. General course electives may also be taken in agriculture and related areas by students wishing greater depth in an agriculture field.

Agriculture Minor

The student must complete the following agriculture course plus five semester hours of approved agriculture courses, and a major selected in another field. General course electives may also be taken in agriculture and related areas by students wishing greater depth in agriculture.

Required Courses in Agriculture 21
AGR 101 — Orientation to Agriculture 1
AGR 133 — Introduction to Animal Science 3
AGR 180 — Introduction to Field Crops 3
AGR 204 — World Food 3
AGR 211 — Soils 3
AGR 215 — Horticultural Science 3
Approved AGR courses 5

Horsemanship Minor

The student must complete a minimum of 21 semester hours of agriculture courses in the following list and a major selected in another field. General course electives may also be taken in horsemanship, agriculture, and related areas by students wishing greater depth in horsemanship.

Course Requirements
AGR 221 — Equitation 3
AGR 243 — Equine Health and Disease 3
AGR 335 — Equitation Teaching 3
AGR 342 — Horse Production 3

Approved Electives 3
Students must select six hours from the following:
AGR 329 — Advanced Stock Seat Horsemanship 3
AGR 332 — Advanced Saddle Seat Horsemanship 3
AGR 333 — Advanced Hunt Seat Horsemanship 3

Pre-Forestry

Students interested in forestry may take their first two years of course work at MSU and then complete their studies at accredited schools of forestry. If at the end of two years a student does not secure admission to an accredited school of forestry, most of the credits earned may be applied toward a degree at MSU. The program may be modified to meet entrance requirements at any institution offering a forestry program.

Required Course Sequence

First Semester 17
BIOL 150 — Introduction to Plant Science 3
CHEM 101 — Survey of Chemistry 4
ENG 100 — Writing I 3
MATH 175 — Calculus I 4
PHED — activity course 1
General elective 2

Second Semester 16
AGR 180 — Introduction to Field Crops 3
CHEM 201 — Survey of Organic Chemistry 4
ENG 200 — Writing II 3
MATH 353 — Statistics 3
PHED — activity course 1
General elective 2

Third Semester 17
AGR 211 — Soils 3
BIOL 215 — General Botany 4
*ITCM 310 — Principles of Surveying 3
PHYS 201, 201A — Elementary Physics I and Laboratory 4
SOC 170 — Rural Sociology 3

Fourth Semester 15
CMSP 108 — Fundamentals of Speech Communication 3
ECON 201 — Principles of Macroeconomics 3
ENG — Literature elective 3
HIS 202 — American Studies 3
PSY 154 — Introduction to Psychology 3

* Prerequisite required
Total 65

Pre-Veterinary Medicine

The Pre-Veterinary Medicine Program is a preprofessional program designed to prepare students for admission to a college of veterinary medicine to earn the Doctor of Veterinary Medicine (DVM) degree. Completion of the pre-veterinary requirements takes three-four years; then veterinary college takes another four years of study.
Since each veterinary college has its own specific admission requirements, it is essential that students work closely with a pre-veterinary advisor throughout the process.

Admission to veterinary college is very state-oriented. States that have veterinary colleges give priority to their own residents but may contract with states that do not have veterinary colleges to accept a certain number of nonresident students each year. In addition, a limited number of out-of-state, noncontract positions may be available. In-state and contract applicants have approximately a one in three chance of acceptance; while out-of-state, noncontract applicants have about a one in 10 chance of acceptance.

The Commonwealth of Kentucky is a participating member in the Southern Regional Education Board Contract Program under which legal Kentucky residents may attend veterinary college at Auburn University or Tuskegee University in Alabama. Students accepted to veterinary college under this contract program pay only the in-state tuition of that university.

Residents of states other than Kentucky may complete the pre-veterinary requirements for the veterinary college of their state at Morehead State University. West Virginia residents may apply under contract to Ohio State University, University of Georgia, and Tuskegee University. The transfer of courses to satisfy the specific requirements of a particular college must be negotiated in advance to assure acceptance. Students must work closely with the pre-veterinary advisor in making the appropriate contacts.

Although a degree is not required for admission to veterinary college, it is advisable to work toward a degree in conjunction with the pre-veterinary requirements. All applicants are not accepted and one must have a suitable degree to build an alternate career. Suitable degree programs include veterinary science, veterinary technology, and biology. The Veterinary Science degree program is specifically designed to address the needs of pre-veterinary students. See the Agricultural Sciences, Veterinary Science Option.

For further information contact:

Pre-Veterinary Advisor
25 MSU Farm Drive
Morehead, KY 40351
606-783-2326

Veterinary Technology

Program Competencies

Students receiving an Associate of Applied Science degree in Veterinary Technology should possess competencies in the following areas as defined by the American Veterinary Medical Association:

1. General Competencies:
   a. Written, oral and interpersonal communication skills.
   b. Applied mathematical skills applicable to the field of veterinary technology.
   c. An awareness of the physical and biological concepts applicable to the field of veterinary technology.
   d. An appreciation of the liberal arts.

2. Specific Competencies:
   a. Anesthesia, including induction, monitoring, and instrumentation.
   b. Animal husbandry, including restraint, behavior, species and breed identification, reproduction, sex determination, and human-animal bonding.
   c. Diseases, preventive medicine (including dentistry), and nursing of companion animals, food-production animals, horses, and laboratory animals.
   d. Economics of veterinary practice.
   e. Ethics, professionalism, and legal applications in veterinary medicine.
   f. Humane animal care and management.
   g. Basic laboratory animal technology.
   h. Medical terminology.
   i. Necropsy techniques.
   j. Nutrition and principles of feeding.
   k. Orientation to the vocation of veterinary technology.
   l. Pharmacology for veterinary technicians.
   m. Principles of imaging, including radiography and ultrasonography.
   n. Professional organizations and continuing education for graduate technicians.
   o. Surgical nursing and assisting, including instrumentation.
   p. Technician utilization and team concepts of health care delivery.
   q. Veterinary anatomy and physiology.
   r. Veterinary clinical pathology and parasitology.
   s. Veterinary microbiology and immunology.
   t. Veterinary office management.
   u. Elementary computer skills pertaining to veterinary technology.
   v. Zoonoses, occupational health hazards, and waste disposal.

3. In addition, students should have the skills necessary to assume responsibility for self-development and lifelong learning in the field of veterinary technology.

Assessment Procedures

Advisory Board consultation
Evaluation by accrediting organization (AVMA)
Exit examination
Survey of employers
Survey of graduates
Graduate performance on state board examinations

Associate of Applied Science

(Six-Semester Program)

The MSU Veterinary Technology Associate Degree Program is approved by the Kentucky Veterinary Medical Association and accredited by the American Veterinary Medical Association. Graduates are eligible to write the National Board Examination for state licensure as a Registered Veterinary Technician or Technologist.

The Veterinary Technology Program has a selective admission policy, which is separate from and in addition to the University’s admission procedures. Admission to the University does not guarantee admission to the Veterinary Technology Program.
In addition to acceptance by the University, applicants must apply for admission to the Veterinary Technology Associate Degree Program and meet the following criteria:

**Special Admission Requirements**

*Note: Enrollment in the core veterinary technology curriculum will be limited to 40 students.*

1. Admission to Morehead State University.
2. Admission to Veterinary Technology Program.
   a. Prerequisite Courses and GPA Requirements:
      1. Students entering the core veterinary technology curriculum from the pre-vet tech curriculum must have a college GPA of 2.6 or greater in non-developmental, college level courses 100 level or above to be accepted into the veterinary technology program and a 2.6 or greater GPA in specified science and math courses (MATH 131 or higher approved general education math, BIOL 160 or BIOL 171, and CHEM 101 or higher).
      2. Transfer students must have a college GPA of 2.6 or greater in 12 or more hours of non-developmental, college level courses 100 level or above to be accepted into the veterinary technology program and a 2.6 or greater GPA in specified science and math courses (MATH 131 or higher approved general education math, BIOL 160 or BIOL 171, or BIOL 234, and CHEM 101 or higher).
      3. Approved non-developmental, college-level course work may include:
         a. General education courses applicable to the Veterinary Technology Associate Degree Program;
         b. Animal science, biology, chemistry, mathematics, computer skills, medical terminology, office management, or ethics.
   b. All applicants:
      1. Minimum 120 hours of documented veterinary supervised work/volunteer experience.
      2. Written recommendation from the above veterinarian.
         a. Veterinary Technology students must possess the health, physical capability, and risk assessment compatible with working with live animals in a veterinary medical context. The HPCR requirements are designed to assure adequate ability to work with live animals, perform the required tasks, and avoid undue risk of injury or disease.
         b. Confidentiality of HPCR Status: It is not required that any student divulge confidential medical information to the program faculty. They must only verify, through their physician, that they meet the HPCR requirements.
   c. Risk Assessment:
      1. Bites and scratches: Prior to handling any animals, students must verify that they are not subject to any undue risk from animal bites and scratches.
      2. Radiation risk assessment: Prior to beginning the second year of the VET sequence, students must verify that they are not subject to any undue risk from assisting with diagnostic radiography procedures on animals.
   d. Verification and Maintenance of HPCR Requirements:
      1. Applicants must provide verification of the HPCR requirements by completion of the Veterinary Technology HPCR Form by a licensed physician(s) upon completion of a thorough physical examination.
      2. The HPCR requirements must be maintained throughout the student’s enrollment in the program.
         a. At the discretion of the program faculty, students may be requested to have their HPCR requirements reevaluated at any point in the program.
         b. Students in the program are required to notify their physician of any significant change in their HPCR status that may place them at increased risk (e.g., pregnancy) and submit a new HPCR Form signed by the physician.

**Required Course Sequence**

General Education Requirements: Students must complete the general education requirements for an Associate of Applied Sciences degree. Any course approved by the University for each of the following categories may be taken, unless otherwise specified:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 108</td>
<td>Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 131</td>
<td>Mathematical Reasoning and Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>ENG 100</td>
<td>Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 200</td>
<td>Writing II</td>
<td>3</td>
</tr>
<tr>
<td>FYS 101</td>
<td>First Year Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>
A student will be dismissed from the program for any of the following situations:

1. Earning a grade less than "C" in, or withdrawing while failing from any required VET course and BIOL 213 or BIOL 217 more than once;
2. Earning a grade less than "C" in, or withdrawing while failing from more than one required VET course and BIOL 213 or BIOL 217;
3. Inability to complete the program within four academic years of beginning the program.

Reinstatement to the program

Once dismissed from the program, a student must reapply to the program and be readmitted. Readmitted students must complete all courses in the VET sequence as if starting for the first time.

Reinstatement into the program is not automatic. Reapplicants must demonstrate both the aptitude and motivation to succeed in the program. Those seeking reinstatement to the VET course sequence must do the following:

By May 30:
1. Submit transcripts of college courses at the end of the current semester (unofficial copy of transcripts is acceptable).
2. Provide the name and address of the veterinary facility where obtaining additional work experience. Include the dates and hours per week.
3. Submit a letter explaining what will be done differently to succeed in the VT program if reinstated. This should include plans for study, time management, etc.

By July 15:
1. Submit letter describing in detail work experience during the past 12 months and explaining why you wish to become a credentialed veterinary technician.
2. Complete any HPCR requirements that are not current (e.g., rabies vaccinations).

Failure to meet the above deadlines will cancel the reapplication process. Readmission will be granted only if the above criteria are met to the satisfaction of the VT faculty and there are class seats available.

Reapplicants will be notified on Aug. 1 whether their petition for readmission has been granted.

Bachelor of Science

Students (including transfers) entering the Bachelor of Science in Veterinary Technology Program must have completed a degree from an AVMA accredited veterinary technology program. Those students that have completed the AAS in Veterinary Technology from Morehead State University may be able to complete the VT-BS degree in two additional semesters with careful planning and council from their advisor.

Note: Enrollment will be limited to 40 students.

General Education

The following specific general education requirements must be completed:

CHEM 101 or CHEM 111 (NSC2)  
VET 499C  

General Education Total 37

Refer to the General Education section for a complete listing of general education requirements for the University.
Program Core Requirements
AGR 143 — Anatomy and Physiology of Livestock 3
AGR 133 — Intro to Animal Science 3
BIOL 217 — Elementary Microbiology 4
VET 108 — Veterinary Clinical Anatomy 3
VET 112 — Animal Care Techniques I 4
VET 213 — Animal Care Techniques II 4
VET 218 — Intro to Veterinary Laboratory Techniques 4
VET 245 — Veterinary Physiology & Pharmacology 4
VET 257 — Concepts of Large Animal Diseases I 2
VET 258 — Small Animal Medicine & Surgery I 2
VET 259 — Veterinary Clinical Pathology I 2
VET 260 — Veterinary Diagnostic Imaging 2
VET 261 — Large Animal Clinics I 1
VET 262 — Small Animal Clinics I 1
VET 264 — Veterinary Clinical Pathology Clinics I 1
VET 265 — Veterinary Diagnostic Imaging Clinics 1
VET 357 — Concepts of Large Animal Diseases II 2
VET 358 — Small Animal Medicine & Surgery II 2
VET 359 — Veterinary Clinical Pathology II 2
VET 366 — Veterinary Dentistry 2
VET 367 — Large Animal Clinics II 1
VET 368 — Small Animal Clinics II 1
VET 363 — Veterinary Clinical Preceptorship 1
VET 364 — Veterinary Clinical Pathology Clinics II 1
VET 365 — Veterinary Dentistry Clinics 1
VET 399C — Clinical Veterinary Seminar 1

Vet Tech BS Core Requirements Total 55

Program Requirements
VET 401 — Veterinary Practice Management 3
VET 402 — Veterinary Clinical Assistantship 1
VET 403 — Advanced Veterinary Clinical Practicum 12
*VET 499C — Veterinary Technician Seminar 3
300 level or above BIOL, AGR, or VET electives 9
General BIOL, AGR, or VET elective 3

Vet Tech BS Program Requirements Total 28
*Counted in general education.

Components of Degree Requirement
General Education 37
Program Requirements 80
General Electives 3
Total Credit Hours Required 120

Department of Biology & Chemistry

Douglas Dennis, Chair
103 Lappin Hall
606-783-2945
d.dennis@moreheadstate.edu

Faculty

Biology & Chemistry

The Department of Biology & Chemistry offers a Bachelor of Science in either Biology or Chemistry. The Biology B.S. degree has three options that meet different career aspirations of students. The Biology B.S. degree options in the area of concentration in Biology are: 1) Biology; 2) Biological Science Teaching; and 3) Environmental Science. Biology students interested in pursuing health-related careers such as pre-chiropractic, pre-dentistry, pre-medical technology, pre-medicine, pre-pharmacy, pre-physician assistant, pre-physical therapy and pre-podiatry, pursue the Biology option. The B.S. degree in Chemistry can either be obtained by completing an area of concentration in professional chemistry or a major in chemistry. The professional chemistry area of concentration is intended for students wanting to pursue a career in chemistry, whereas the major in chemistry is for students intending to pursue chemistry careers that strongly intersect with other disciplines. There is only a single degree option for the professional chemistry degree. There are three degree options for the major in chemistry. These include: 1) General Chemistry; 2) Environmental Chemistry; and 3) Chemistry Teaching. Chemistry students interested in pursuing health-related careers such as pre-pharmacy, pre-medicine, and pre-optometry usually pursue the General Chemistry option of the major in chemistry.

The Biology and Chemistry programs are designed to provide a strong foundation for the development of professionals in the specific areas outlined. The student must work closely with his/her advisor to assure that proper course sequences are followed. The Department of Biology & Chemistry also offers minors in both Biology and Chemistry.

Biology

Bachelor of Science - Area of Concentration in Biological Sciences

The Biological Sciences concentration is deep and diverse, enabling students to pursue careers in Environmental Science (option 3), teach at the secondary level (option 2), pursue a career in the health professions, or as a professional biologist (option 1). In addition to these career paths, students may find it advantageous to combine their biology study with other disciplines allowing them to pursue careers in law, public policy, and other areas that intersect with the field.

Program Competencies

Students graduating with the Bachelor of Science degree in Biology should possess the following:
1. Written, oral and interpersonal communication skills in the sciences that will allow the graduate to collect, analyze, interpret, utilize and present information that is contemporary in the biological sciences.
2. An awareness of the basic concepts of the physical and biological sciences and how these concepts are applicable in the profession.
3. An awareness of the importance of the arts, humanities, social and behavioral sciences, health sciences as well as the biological and physical sciences to the human community.

4. A basic understanding of literacy of all disciplines of biology, from molecular to cellular to organismal to population levels that unite organismal, continuity, diversity and unity of life.

5. A general competency in basic inorganic and organic chemistry as well as in introductory physics, mathematics and statistics.

Assessment Procedures
- Exit examinations
- Employer feedback
- Graduate feedback
- Performance of graduates on entrance examinations to post-baccalaureate programs

Biology Option 1: Biology

General Education - Core
The following General Education courses must be complete plus additional requirements. See the General Education section for remaining requirements.

- BIOL 171 — Principles of Biology (NSC1) 4
- CHEM 111 — Principles of Chemistry I (NSC2) 4
- *MATH 152 — College Algebra or MATH 141 or MATH 175 — Calculus I 3-4
- BIOL 499D — Principles of Evolution 3

General Education Total 38-39

*Students taking MATH 152 as a general education core class must also complete MATH 141 as an additional requirement; core remains three hours. Students having an ACT below 22 will take MATH 141 as a general elective.

Biology Program Requirements
- BIOL 210 — General Zoology 4
- BIOL 215 — General Botany 4
- BIOL 304 — Genetics 3
- BIOL 317 — Principles of Microbiology 4
- BIOL 380 — Cell Biology 3
- BIOL 425 — Animal Physiology or
- BIOL 426 — Plant Physiology 3
- BIOL 461 — Ecology 3
- MATH 353 — Statistics 3

Advanced Biology Electives - choose three courses from the following:
- BIOL 318, BIOL 334, BIOL 336, BIOL 337, BIOL 356, BIOL 357, BIOL 407, BIOL 409, BIOL 421, BIOL 424, BIOL 425, BIOL 426, BIOL 427, BIOL 428, BIOL 429, BIOL 431, BIOL 433, BIOL 437, BIOL 438, BIOL 443, BIOL 446, BIOL 447, BIOL 449, BIOL 452, BIOL 456, BIOL 490

Biology Program Requirements 36-39

Supplemental Requirements
- CHEM 112 — Principles of Chemistry II 4
- BIOL/CHEM 301 — Fundamentals of Biochemistry 4
- CHEM 326 — Organic Chemistry I 4
- PHYS 201 — Elementary Physics I 3
- PHYS 201A — Elementary Physics I Laboratory 1
- PHYS 202 — Elementary Physics II 3
- PHYS 202A — Elementary Physics II Laboratory 1

Supplemental Requirements 20

Components of Degree Requirement
- General Education 38-39
- Program Requirements 36-39
- Program Supplements 20
- General Electives 22-26

Total Hours Required 120

(additional hours may be required depending on specific course choices)

Biology Option 2: Biology Teaching

General Education
Refer to the General Education section for a complete listing of general education requirements for the University.

- BIOL 171 — Principles of Biology (NSC1) 4
- CHEM 101 — Survey of Chemistry (NSC2) or CHEM 111 — Principles of Chemistry I (NSC2) 4
- *MATH 152 — College Algebra or MATH 141 or MATH 174 — Pre-calculus or MATH 175 — Calculus I 3-4
- BIOL 499D — Principles of Evolution 3

General Education Total 38-39

*Students taking MATH 152 as a general education core class must also complete MATH 141 as an additional requirement; core remains three hours. Students having an ACT below 22 will take MATH 141 as a general elective.

Program Requirements
- BIOL 210 — General Zoology 4
- BIOL 215 — General Botany 4
- BIOL 317 — Principles of Microbiology 4
- BIOL 461 — Ecology 3
- BIOL 234 — Human Anatomy and Physiology I 3
- BIOL 235 — Human Anatomy and Physiology II 3
- BIOL 304 — Genetics 3
- BIOL 380 — Cell Biology 3
- BIOL 402 — Integrated Biology, Mathematics, Physical Science, Field Experiences in Teaching 3
- BIOL 403 — Integrated Biology, Mathematics, Physical Science, Field Experiences in Teaching 3
- Advanced Biology Elective 3

Students must complete one of the following courses:
- BIOL 318, BIOL 334, BIOL 407, BIOL 409, BIOL 431, BIOL 433, BIOL 438, BIOL 437, or BIOL 452

Program Requirements Total 39
Supplemental Requirements
CHEM 112 — Principles of Chemistry II or 4
CHEM 201 — Survey of Organic Chemistry 4
BIOL/CHEM 301 — Fundamentals of Biochemistry 4
ESS 108 — Physical Geology 4
PHYS 201 — Elementary Physics I 3
PHYS 201A — Elementary Physics I Laboratory 1

Teacher Education Requirements
EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment in Education 3
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Educational Methods and Technology 12
EDSE 483 — Educational Methods and Technology 3
EDSP 230 — Education of Exceptional Children 3

Components of Degree Requirement
General Education 38-39
Program Requirements 39
Supplemental Requirements 16
Teacher Education Requirements 26-27

Degree Requirement Total 120

Biology Option 3: Environmental Science

General Education - Core

The following General Education courses must be complete plus additional requirements. See the General Education section for remaining requirements.

BIOL 171 — Principles of Biology (NSC1) 4
CHM 101 — Survey of Chemistry (NSC2) or 4
CHEM 111 — Principles of Chemistry I (NSC2) 4
MATH 152 — College Algebra or 3-4
MATH 175 — Calculus I 3
BIOL 499C — Contemporary Environmental Issues 3

General Education Total 38-39

Program Requirements
BIOL 155 — Introduction to Environmental Science 3
BIOL 210 — General Zoology 4
BIOL 215 — General Botany 4
BIOL 317 — Principles of Microbiology 4
BIOL 356 — Environmental Biology 3
BIOL 357 — Environmental Testing Methods 3
BIOL 409 — Limnology 3
BIOL 461 — Ecology 3
MATH 353 — Statistics 3
Advanced Biology Electives 9

Student must complete any three of the following courses:
BIOL 318, BIOL 334, BIOL 431, BIOL 433, BIOL 438, BIOL 437, BIOL 452 or MSCI Approved Gulf Coast Laboratory elective

Program Requirements Total 39

Supplemental Requirements
CHEM 112 — Principles of Chemistry II or 4
CHEM 201 — Survey of Organic Chemistry 4
AGR 211 — Soils 3
ECON 401 or GEO 349, or GEO 351 3
ESS 108 — Physical Geology 4
ESS 376 — Environmental Geology 3
ESS 425 or ITCM 307 3
GOVT 324 — Environmental Law and Policy 3
PHIL 333 — Environmental Ethics 3

Supplemental Requirements Total 30

Components of Degree Requirement
General Education 38-39
Program Requirements 39
Supplemental Requirements 30
General Electives 13

Degree Requirement Total 120 - 121

Emphasis in Environmental Science and Regional Analysis

In addition to the requirements fulfilling the Area of Concentration in Biological Sciences, Environmental Science (Option 3), the following courses are required:

RAPP 201 — Society, Nature, and Development 3
RAPP 202 — Basic Computer Tech in Regional Analysis 3
RAPP 300 — Seminar in Regional Issues I 3
RAPP 350 — Practicing Regional Analysis I 3
RAPP 450 — Practicing Regional Analysis II 3
RAPP 490 — Seminar in Regional Issues II 3

RAPP and Supplemental Requirements Total 48

Biology Minor

Core
BIOL 171 — Principles of Biology 4
BIOL 210 — General Zoology 4
BIOL 215 — General Botany 4
BIOL 304 — Genetics 3

Core Total 15

Electives

Three additional courses (minimum of nine hours). These courses must be selected from the list of BIOL courses (Core and Elective) accepted for the biology area of concentration (Option 1)

Total Hours for a Biology Minor 24

Supplemental Requirements - Minor

The student must take one of the following sequences:

Sequence I
CHEM 101 - Survey of General Chemistry 4
CHEM 201 - Survey of Organic Chemistry 4
or
Sequence II
CHEM 111 - Principles of Chemistry I 4
CHEM 112 - Principles of Chemistry II 4
Total Supplemental Hours 8

Pre-Chiropractic
Advisor: M. Fultz
Admission requirements for schools and colleges of chiropractic medicine emphasize a strong background in science and the humanities. Pre-chiropractic students are encouraged to fulfill the requirements and complete their 90 semester hours with additional courses in the biological sciences. An emphasis on courses in the basic sciences, particularly biology, will prepare the student for success in chiropractic medicine.

Requirements
Most schools or colleges of chiropractic medicine require the following preprofessional education for admission to the Doctor of Chiropractic degree programs:
1. Ninety semester hours leading to a baccalaureate degree in a college or university program with a minimum GPA of 2.5 on a 4.0 scale.
2. Six semester hours of biology with laboratory.
3. Six semester hours of general chemistry with laboratory.
4. Six semester hours of organic chemistry with laboratory.
5. Six semester hours of physics with laboratory.
6. Six semester hours of English and/or communication skills.
7. Three semester hours of psychology.
8. Fifteen semester hours of social sciences and/or humanities.
9. It is recommended that biology courses be selected from principles of biology, cell biology, general zoology, or principles of microbiology.

For purposes of course scheduling and complete preparation for chiropractic schools, all pre-chiropractic students should work closely with their assigned advisor.

MSU has an articulation agreement with Logan College of Chiropractic and Palmer College of Chiropractic which allows students to enter professional school after three years and still be able to receive a BS degree from MSU.

Pre-Dentistry
Advisor: C. Tuerk
Dental schools' selection of applicants is based on science GPA, overall grades, Dental Admission Scores (DAT) and demonstration of superior qualifications in personal maturity, academic competence and demonstrated motivation for pursuing a career in dentistry. The DAT and application process should be completed by the fall one year prior to desired entry into dental school. Preparation for the DAT requires completion of a suggested curriculum emphasizing the biological and physical sciences. Due to increasingly competitive applicant pools, it is strongly recommended that students be very near to completion of a bachelor's degree at the expected time of entry into dental school. Pre-dental students generally follow a curriculum designed for the area of concentration in biology (option 1: nonteaching). However, certain complementary and specific elective and general education courses are recommended. A more detailed suggested curriculum is available from the pre-dental advisor.

Pre-Medical Technology/Clinical Laboratory Science Program
Advisor: C. Wymer
The field of medical technology or clinical laboratory science involves the medical application of the basic sciences. Principles from cellular and molecular biology, organic and biochemistry, microbiology, immunology, genetics and physiology are applied to laboratory testing.

In the clinical laboratory, samples from the body are tested to determine the presence, absence, extent or cause of disease. The accurate performance of these complex tests requires advanced education in all areas of clinical laboratory sciences, including chemistry, toxicology, immunohematology, hematology, urinalysis, and microbiology. Medical Technology is an exciting career choice for people who like biology and chemistry, enjoy laboratory work, and desire to help others.

The continued growth of the health care industry is accompanied by an increasing demand for clinical laboratory settings. Graduates acquire positions in research laboratories, medical industry and sales, forensic medicine, law enforcement, state health departments, veterinary laboratories, educational programs, physician offices and large clinical laboratories.

After several years experience, medical technologists may choose to move up the career ladder into educational, supervisory, and managerial roles. Others obtain advanced education in management, business, or the computer sciences. Graduates of this program have excelled in all of these areas.

MSU is affiliated with the following accredited hospital schools of medical technology:
St. Elizabeth Medical Center, Covington, Ky.
Owensboro Mercy Health System, Owensboro, Ky.
Bellarmine University, Louisville, Ky.

Students pursuing a Bachelor of Science degree with the assistance of their medical technology advisor, usually begin to make applications to medical technology schools at the beginning of their senior year. Acceptance by an accredited school of medical technology for a clinical year of study is competitive and is generally based on the applicant's academic record (minimum of 2.8 GPA and a minimum science GPA of 2.5), personal interviews, and letter of recommendation. The final decision for admittance into the program is made by the appropriate school of medical technology. MSU makes every effort to secure each student a position at one of the hospital-based schools of medical technology.

Affiliated hospitals charge tuition during the clinical year to help defray expenses incurred in providing the students laboratory experience. The hospitals provide the medical technology coordinator with an estimate of expenses, in addition to tuition or fees, the student will likely incur during the clinical training. Grants and/or loans may be available for eligible students.
Affiliated hospital schools do not assume any obligation to accept a maximum or minimum number of students each year from MSU. Selection is based on open competition.
Clinical Year

The following courses, equivalents or subject areas, must be satisfactorily completed (at least 2.0 average) during the hospital-based clinical year to receive credit: Immunohematology, 58 hours lecture and 106 hours laboratory; Medical Microbiology, 80 hours lecture and 180 hours laboratory; Medical Mycology, 30 hours lecture and 33 hours laboratory; Serology and Immunology, 40 hours lecture and 32 hours laboratory; Routine Analysis, 40 hours lecture and 150 hours laboratory; Clinical Chemistry, 114 hours lecture and 180 hours laboratory; Medical Parasitology, 25 hours lecture and 45 hours laboratory; Hematology, 99 hours lecture and 180 hours laboratory; Medical Technology Seminar, 16 hours lecture; and Special Topics, 91 hours lecture and 33 hours laboratory.

Certification Examination

Upon successful completion of the clinical year of training, students are eligible to take a certifying examination in medical technology, such as the American Society of Clinical Pathologist (ASCP), Board of Registry.

For the purpose of scheduling course selection and complete preparation for medical technology school, premedical technology students must work closely with their faculty advisors.

For more information on Premedical Technology, important links may be accessed from the website given at the beginning of this program description.

Pre-Pharmacy

Advisors: D. Eisenhour, S. O’Keefe

The suggested program of pre-pharmacy study will meet the requirements for the University of Kentucky College of Pharmacy and most other pharmacy schools. To assure proper course selections and to meet all admission requirements, students must work closely with their faculty advisor. The 70 hours of required pre-pharmacy coursework of most colleges of pharmacy can be completed in two years, although it usually takes three years because of the rigorous nature of the coursework. Four additional years are required at pharmacy school. Pre-pharmacy students in the department generally follow the initial curriculum designed with an emphasis in biology and chemistry; however, certain complementary and specific general education courses are recommended. The pre-pharmacy curriculum includes four semesters of biology, two semesters of general chemistry, two semesters of organic chemistry, two semesters of math, one semester of statistics, two semesters of English and one semester of microeconomics. An academic handbook and suggested curriculum are available from the pre-pharmacy advisor.

Pre-Physical Therapy

Advisor: D. Peyton

Most schools of physical therapy require 60 to 70 hours of selected coursework in a pre-physical therapy program. Students who plan to enter the program in physical therapy should consult the catalog of the school they plan to attend to be certain they fulfill specific requirements.

The suggested pre-physical therapy curriculum at MSU will meet the requirements at most physical therapy schools. To assure proper course selection and to meet all admission requirements, students must work closely with their faculty advisor.

Pre-Physician Assistant

Advisor: D. DeMoss

The Pre-Physician Assistant Program at MSU prepares students for admission to the professional school component of the University of Kentucky Physician Assistant Studies Program, either in Lexington or at its satellite campus in Morehead. To satisfy admission prerequisites, the recommended Pre-Physician Assistant curriculum at MSU consists of the completion of an area of concentration in biology. In addition, the student must also complete courses in: medical terminology, sociology, general psychology and developmental psychology.

MSU offers courses acceptable to meet all of the University of Kentucky prerequisite requirements. To assure proper course selection and to meet all admission requirements to the professional program, students must work closely with their assigned faculty advisor.

To gain admission into the postgraduate program, all students must have completed a bachelor’s degree at an accredited institution including specific prerequisite courses. Selection of the applicants is based on cumulative GPA, GRE, personal interview, and recommendation. Because of an increasingly competitive applicant pool, it is strongly recommended that applicants obtain a bachelor’s degree in one of the science fields. Completion of the two-and-a-half year professional component in Physician Assistant School leads to a Master of Science in Physician Assistant Studies from the University of Kentucky.

Pre-Podiatric Medicine

Advisor: M. Fultz

Podiatric Medicine is the branch of medical sciences devoted to the study of human movement with primary focus being the ankle and foot. The podiatric physician is a health professional who is involved with examination, prevention, diagnosis, and treatment of foot disorders by physical, medical, and surgical means. A podiatric physician makes independent judgments, utilizes x-rays and laboratory tests for diagnostic purposes, prescribes medications, orders physical therapy, sets fractures, and performs surgery.

Admission to a college of podiatric medicine generally requires completion of a minimum of 90 semester hours of coursework at an accredited undergraduate institution. However, because of the competitive applicant pool, it is strongly recommended that students obtain a bachelor’s degree prior to entering a college of podiatric medicine. All applicants must take the Medical College Admissions Test (MCAT) prior to admission to their podiatry school of choice. To assure proper course selection and to meet all admission requirements to the professional program, students should work closely with their faculty advisor.
A wide range of opportunities exist for the podiatric medical practitioner in today's healthcare system. Many communities are in critical need of the skills, techniques, and knowledge that a podiatrist can contribute to the team approach of providing comprehensive health care.

Pre-Medicine

Advisor: D. Saxon

Admission requirements vary among medical schools, but all recognize the importance of a strong foundation in the natural sciences (biology, general and organic chemistry, mathematics, and physics), highly developed communication and thinking skills, and a good background in the social sciences and humanities. Competencies in these areas should be developed before taking the required Medical College Admission Test (MCAT). Many premedical students elect to study an area of concentration in biology, but other options are acceptable and may be completed with the aid of the departmental premedical advisors. Certain complementary and specific general education courses are recommended for the premedical program of study. Students granted early admission to their medical school of choice may, upon completion of their medical degree, transfer selected medical school courses back to MSU for completion of their bachelor's degree in the sciences.

Since specific requirements do vary among medical schools, it is essential that the student investigate the requirements of the medical school(s) of his/her choice during the first year of the preparatory program.

For purposes of scheduling, course selection, and complete preparation for medical school, the pre-medical student must work closely with the assigned faculty advisor.

Gulf Coast Research Laboratory

www.usm.edu/gcr/

MSU maintains a formal affiliation arrangement with the Gulf Coast Research Laboratory (GCRL) in Ocean Springs, Miss. Through this arrangement, our students may take field courses in marine science at GCRL during the summer. Credits for these courses are awarded through the University of Southern Mississippi and will be accepted as transfer credit at Morehead State University. The following is a list of courses taught at GCRL, their level (undergraduate or graduate), and the semester credit hours. Not all courses are offered each year. Most courses have prerequisites of eight to 16 hours of biology.

Marine Science I: Oceanography (U) 5
Marine Science II: Marine Biology (U) 5
Marine Invertebrate Zoology (U/G) 6
Marine Ichthyology (U/G) 6
Marine Ecology (U/G) 5
Marine Aquaculture (U/G) 6
Marine Mammals (U/G) 5
Marine Botany (U/G) 3
Biotechnology in Marine Biology (U/G) 6
Coastal Ecology for Teachers (U/G) 4
Special Topic: Beach Fauna (U/G) 2
Special Topic: Cetacean Behavior and Cognition (U/G) 3
Special Topic: Fauna of Submerged Aquatic Vegetation 2

(U/G)

Special Problems in Marine Science (U/G) 1-6
Special Topics in Marine Science (U/G) 1-6

Students may obtain more information about the Gulf Coast Research Laboratory and admission to the summer program by writing:

Office of Student Services
Gulf Coast Research Laboratory
P.O. Box 7000
Ocean Springs, MS 39566-7000
Telephone 228-872-4200

Chemistry

Program Competencies

The student will:

1. Develop enough learning techniques to adapt to new vocational and educational situations, i.e., be able to self-educate in new applied areas and keep up with progress in the field.
2. Develop enough self-confidence, personal independence and understanding of scientific methods to carry out a technical project on one's own with only consultant-style help.
3. Read technical literature with good comprehension.
4. Write technical reports in a clear and logical way.
5. Present oral reports on technical material in a clear and logical way.
6. Be able to retrieve any needed information from the scientific literature.
7. Analyze laboratory data for its correctness and locate probable sources of error, including an understanding of standard statistical tests and the concepts of error and uncertainty, and an understanding of the advantages and limitations of current instrumental and other laboratory techniques.
8. Be able to use the basic principles of chemistry as presented in the first-year class in a wide variety of contexts, especially the relationship of the microscopic physical model to bulk chemical behavior. Be able to relate scientific principles to observed behavior.
9. Comprehend the major systems of nomenclature used in chemistry and know enough about the basic functional groups of inorganic and organic chemistry to have a primitive vocabulary of basic types of chemical reactions and to be able to use this to make rational chemical predictions.

Assessment Procedures

Performance of graduates on entrance examinations
Performance of graduates in professional schools
Surveys of graduates
Surveys of employers
Exit Exam

A degree in chemistry opens a wide variety of careers to a graduate. Careers in chemistry involve such diverse areas as the development of new materials, environmental protection, and drug design. A chemistry degree is frequently used as a preparation for entrance into law, medical, dental, veterinary, and pharmacy colleges.
There are two possible degree paths in the chemistry program, an area of concentration and a major. Students completing an area of concentration either continue on to graduate school or enter an industrial position directly upon graduation. Graduates with a major in chemistry may pursue careers in industry in chemical information, technical writing, chemical sales and technical support. The chemistry major may also serve as a basis for further study in biochemistry, medicine, environmental science, pharmaceutical science, physiology or molecular biology. Students may also receive dual degrees through the 3-2 Program in chemical engineering. (See the description under Pre-Engineering.)

Chemistry

Bachelor of Science - Area of Concentration in Professional Chemistry

A degree in Chemistry opens a wide variety of careers to a graduate. Careers in chemistry involve such diverse areas as the development of new materials, environmental protection, and drug design. A chemistry degree is frequently used as a preparation for entrance into law, medical, dental, veterinary, and pharmacy colleges. Students completing an area of concentration either continue on to graduate school or enter an industrial position directly upon graduation.

General Education - Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOL 171 — Principles of Biology (NSC1)</td>
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<tr>
<td>CHEM 111 — Principles of Chemistry I (NSC2)</td>
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<tr>
<td>MATH 174 — Pre-Calculus Mathematics</td>
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<tr>
<td>CHEM 499C — Senior Thesis I and</td>
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<tr>
<td>CHEM 499D — Senior Thesis II</td>
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General Education Total 38

Area of Concentration (Program) Requirements

<table>
<thead>
<tr>
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<th>Hours</th>
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<tbody>
<tr>
<td>CHEM 112 — Principles of Chemistry II or</td>
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<tr>
<td>CHEM 131 — Environmental Chemistry I</td>
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<tr>
<td>CHEM 326 — Organic Chemistry I</td>
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<tr>
<td>CHEM 327 — Organic Chemistry II</td>
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<td>CHEM 340 — Chemical Information</td>
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<td>CHEM 351 — Bioinorganic Chemistry</td>
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<td>CHEM 360 — Analytical Chemistry</td>
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<td>CHEM 441 — Physical Chemistry I</td>
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<td>CHEM 442 — Physical Chemistry II</td>
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<tr>
<td>CHEM 451 — Advanced Inorganic Chemistry</td>
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<tr>
<td>CHEM 460 — Analytical Chemistry II</td>
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<td>CHEM 476 — Special Problems or equivalent CHEM 302 or higher lab elective with prior approval of a chemistry advisor</td>
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<tr>
<td>PHYS 231 — Engineering Physics I</td>
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Total 41

Supplemental Requirements

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<tr>
<th>Course</th>
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<tr>
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<td>MATH 275 — Calculus II</td>
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<td>MATH 276 — Calculus III or</td>
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<tr>
<td>MATH 363 — Differential Equations or</td>
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<tr>
<td>MATH 365 — Introduction to Mathematical Statistics</td>
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<tr>
<td>PHYS 231A — Engineering Physics I Laboratory</td>
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<td>PHYS 232 — Engineering Physics II</td>
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<td>PHYS 232A — Engineering Physics II Laboratory</td>
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Total 17

Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
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<tr>
<td>General Education</td>
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<tr>
<td>Program Requirements</td>
<td>41</td>
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<td>Program Supplements</td>
<td>17</td>
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<tr>
<td>General Electives</td>
<td>24</td>
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</tbody>
</table>

Total Hours Required 120

For students who plan to enter an industrial position directly upon graduation, cooperative study is recommended.

Chemistry Option 1: General Chemistry

Bachelor of Science - Major in Chemistry

Graduates with a major in Chemistry may pursue careers in industry in chemical information, technical writing, chemical sales, and technical support. The chemistry major may also serve as a basis for further study in biochemistry, medicine, environmental science, pharmaceutical science, physiology or molecular biology. Students may also receive dual degrees through the 3-2 Program in Chemical Engineering. (See the description under Pre-Engineering.)

The program has three options. Students who wish to work in the chemical industry will follow the general option. This option will be useful for preparation for work in related fields or for professional schools when combined with other courses, minors or majors.

The environmental chemistry option prepares students to work directly in positions in the environmental industry or for graduate study in this field or law.

The chemistry teaching option is solely intended to qualify the student for state certification for secondary school chemistry teaching.

Every student completing a BS with a major in chemistry must take the following core courses and supplemental requirements regardless of the chosen option.

General Education - Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 171 — Principles of Biology (NSC1)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111 — Principles of Chemistry I (NSC2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 174 — Pre-Calculus Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 499C — Senior Thesis I and</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 499D — Senior Thesis II</td>
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</tr>
</tbody>
</table>

General Education Total 38

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 112 — Principles of Chemistry II or</td>
<td></td>
</tr>
<tr>
<td>CHEM 131 — Environmental Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 326 — Organic Chemistry I</td>
<td>4</td>
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<tr>
<td>CHEM 327 — Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 351 — Bioinorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 360 — Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 441 — Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 442 — Physical Chemistry II</td>
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<tr>
<td>CHEM 451 — Advanced Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 460 — Analytical Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 476 — Special Problems or equivalent CHEM 302 or higher lab elective with prior approval of a chemistry advisor</td>
<td>1</td>
</tr>
<tr>
<td>CHEM Electives above 300 level (BIOL 490 is also an accepted course)</td>
<td>8</td>
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</tbody>
</table>

Program Requirements Total 25
Supplemental Requirements
MATH 175 — Calculus I 4
PHYS 201 — Elementary Physics I and PHYS 201A 4
PHYS 202 — Elementary Physics II and PHYS 202A 4
Supplements Total 12

Components of Degree Requirement
General Education 38
Program Requirements 25
Program Supplements 12
Minor 21
General Electives 24
Total Hours Required 120

Chemistry Option 2: Environmental Chemistry

General Education - Core
BIOL 171 — Principles of Biology (NSC1) 4
CHEM 111 — Principles of Chemistry I (NSC2) 4
MATH 174 — Pre-Calculus Mathematics 3
CHEM 499C — Senior Thesis I and 2
CHEM 499D — Senior Thesis II 1
General Education Total 38

Program Requirements
CHEM 112 — Principles of Chemistry II or
CHEM 131 — Environmental Chemistry I 4
CHEM 326 — Organic Chemistry I 4
CHEM 351 — Bioinorganic Chemistry 3
CHEM 360 — Analytical Chemistry 3
CHEM 441 — Physical Chemistry I 3
CHEM Electives above 300 8
SCI 402 — Integrated Biology, Mathematics & Physical Science Teaching Methods
SCI 403 — Integrated Biology, Mathematics, & Science Field Experiences in Teaching
Program Requirements Total 31

Supplemental Requirements
MATH 175 — Calculus I 4
PHYS 201 — Elementary Physics I and PHYS 201A 4
PHYS 202 — Elementary Physics II and PHYS 202A 4
Supplements Total 12

Teacher Education Requirements
EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment in Education
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Mngrt. for Secondary Teachers
EDSP 230 — Education of Exceptional Children 3
Teacher Education Requirements Total 30

Components of Degree Requirement
General Education 38
Program Requirements 31
Program Supplements 12
Teacher Education Requirements 30
General Electives
Total Hours Required 120

A minor in Environmental Science is strongly recommended with this option because it also includes the prerequisites for the BI-OL/ESS courses listed above.

Where students take a double major, upper division chemistry electives may be taken to replace CHEM 499C and CHEM 499D with the permission of chemistry advisor.

Chemistry Option 3: Chemistry Teaching

General Education - Core
BIOL 171 — Principles of Biology (NSC1) 4
CHEM 111 — Principles of Chemistry I (NSC2) 4
MATH 174 — Pre-Calculus Mathematics 3
CHEM 499C — Senior Thesis I 2
CHEM 499D — Senior Thesis II 1
General Education Total 38

Program Requirements
CHEM 112 — Principles of Chemistry II or
CHEM 131 — Environmental Chemistry I 4
CHEM 326 — Organic Chemistry I 4
CHEM 351 — Bioinorganic Chemistry 3
CHEM 360 — Analytical Chemistry 3
CHEM 441 — Physical Chemistry I 3
CHEM Electives above 300 8
SCI 402 — Integrated Biology, Mathematics & Physical Science Teaching Methods
SCI 403 — Integrated Biology, Mathematics, & Science Field Experiences in Teaching
Program Requirements Total 31

Supplemental Requirements
MATH 175 — Calculus I 4
PHYS 201 — Elementary Physics I and PHYS 201A 4
PHYS 202 — Elementary Physics II and PHYS 202A 4
Supplements Total 12

Teacher Education Requirements
EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment in Education
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Mngrt. for Secondary Teachers
EDSP 230 — Education of Exceptional Children 3
Teacher Education Requirements Total 30

Components of Degree Requirement
General Education 38
Program Requirements 31
Program Supplements 12
Teacher Education Requirements 30
General Electives
Total Hours Required 120

In order to achieve state certification for teaching chemistry, the requirements for a secondary education certificate as listed by the College of Education must be satisfied. Currently, the course requirements are EDF 207, EDF 211, EDF 311, EDSE 312, EDSP 230, EDSE 416, and EDSE 483. For other requirements for certification,
see the College of Education section elsewhere in the catalog and an advisor in the College of Education.

*Chemistry Minor

CHEM 111 — Principles of Chemistry I 4
CHEM 112 — Principles of Chemistry II or CHEM 131 — Environmental Chemistry I 4
CHEM 326 — Organic Chemistry I 4
CHEM 360 — Analytical Chemistry 3
CHEM — Electives numbered 302 or higher and approved by chemistry advisor

Total 21

*At least 50 percent of the required chemistry coursework in the area of concentration or the major in chemistry must be taken in residency. At least 10 hours of chemistry above CHEM 301 must be taken in residency to complete the chemistry minor.

Pre-Pharmacy

Advisors

Z. Barnes, A. Macintosh

The suggested Pre-Pharmacy Program with a chemistry major meets the requirements of most pharmacy schools; electives are tailored to meet the needs of individual students while providing excellent training in chemistry. A core of biology classes is also taken along with some business, social science, physics and math classes.

Pharmacy schools particularly encourage students holding degrees in chemistry and biology to apply for admission. Students may apply for admission to pharmacy school after three years, but a significant number of applicants spend four years at MSU and complete requirements for a BS degree. Specific courses in pharmacy school may be transferred back upon completion of pharmacy school to finish the chemistry degree at MSU. In making admissions decisions, pharmacy schools consider a student’s academic record, standardized exam scores, communication skills, integrity, and maturity. Students in the Pre-Pharmacy Program are encouraged to participate in activities to develop and demonstrate all of these characteristics. Pharmacy schools also strongly advise work experience in a pharmacy. Specific courses may be required for admission to particular pharmacy schools, and pre-pharmacy students should carefully plan their course schedules with their chemistry advisors.

The chemistry major for pre-medical students develops and strengthens communication and thinking skills and gives a good background in chemistry. Additional course work in physics and mathematics helps prepare students for medical school. Most pre-medical students who major in chemistry also minor in biology, though other minors are possible. Recommended general education classes in social and behavioral sciences and humanities round out the student’s education.

Pre-Medicine

Advisor

A. Macintosh

Medical schools also consider standardized exam scores, communication skills, integrity, maturity and community involvement. Students should pursue activities which demonstrate these characteristics.

Most students finish their degrees at MSU before going to medical school, but students who gain early admission may transfer back specific courses upon completion of medical school to finish the MSU chemistry degree provided other graduation requirements have been met. Specific medical schools may have varying requirements and students should investigate their schools of choice early. Academic advisors work closely with students planning their sequence of courses for degrees.

Pre-Optometry

Advisor

M. Blankenbuehler

The Pre-Optometry program is a three-year preparatory program designed to meet the entrance requirements of optometry schools. However, optometry school applicants with a four-year bachelor’s degree are generally given preferential consideration. Students may complete the bachelor’s degree in any area, so long as they include all courses required for admission to the optometry school to which they apply. Optometry school is a four-year program. Before seeking admission to an optometry school, students must take the Optometry Admission Test (OAT). The Commonwealth of Kentucky will pay a portion of the fees for Kentucky residents enrolled at the Southern College of Optometry (Memphis), the University of Alabama School of Optometry, and the Indiana University School of Optometry.

Core Courses

BIOL 171 — Principles of Biology 4
BIOL 210 — General Zoology 4
BIOL 317 — Principles of Microbiology 4
BIOL 337 — Comparative Anatomy 3
BIOL 425 — Animal Physiology 3
CHEM 111 — Principles of Chemistry I 4
CHEM 112 — Principles of Chemistry II 4
CHEM/BIOI. 301 — Fundamentals of Biochemistry 4
CHEM 326 — Organic Chemistry I 4
CHEM 327 — Organic Chemistry II 4
ENG 100 — Writing I 3
ENG 200 — Writing II 3
MATH 175 — Calculus I 4
MATH 353 — Statistics 3
PHYS 201 — Elementary Physics I 3
PHYS 201A — Elementary Physics I Laboratory 1
PHYS 202 — Elementary Physics II 3
PHYS 202A — Elementary Physics II Laboratory 1
PSY 154 — Introduction to Psychology 3
Social Science electives 6

Total 68

Additional recommended courses

BIOL 234 — Human Anatomy & Physiology I 3
BIOL 235 — Human Anatomy & Physiology II 3
BIOL 304 — Genetics 3
Acceptance into optometry school depends largely upon academic performance. Therefore, the student considering this program should have a strong high school background in science and mathematics.

The core courses represent common requirements among schools of optometry. Specific schools have additional requirements.

Students receiving a bachelor's degree from Morehead State University must complete the requirements for graduation found in this catalog. Students should work closely with the pre-optometry advisor and an advisor in their selected major to ensure that requirements for both programs are met.

Earth Systems Science - Geology Option

Bachelor of Science

Area of Concentration

The Area of Concentration is intended for students who desire rigorous, broad-based preparation in most of the subdisciplines within geology. This program is strongly recommended for students who wish to attend graduate school in a geosciences area.

Earth Systems Science - Geology Option

General Education - Core

ESS 108/108L — Physical Geology (NSC2) 4
ESS 499C — ESS Senior Thesis; or *Geology Field Camp 3
MATH 174 — Pre-Calculus Mathematics 3

General Education Total 37

*Students who intend to pursue a graduate degree should take a geology field camp instead of the other two capstone options. A Geology Field Camp may be substituted for the capstone requirements and must be taken off-campus at an accredited university.

MATH 174 Pre-Calculus Mathematics may be substituted for MATH 141 and MATH 152. In this case, students usually take MATH 175 and MATH 275 under Supplemental Requirements. All students who intend to pursue a graduate degree should take math through MATH 275.

Program Requirements

ESS 201/201L — Historical Geology 3
ESS 362 — Mineralogy 4
ESS 363 — Petrology 4
ESS 315/ESS 315L — Sedimentation and Stratigraphy 4
ESS 325/ESS 325L — Earth Structure and Tectonics 4
ESS 350/350L — Geomorphology 3
GEO 351 — Geographic Information Systems 3
ESS Electives (select from the following:) CHEM 332, ESS 276, ESS 303, ESS 340, ESS 376, ESS 379, ESS 380, ESS 425 or *Geology Field Camp 15

Program Requirements Total 40

*If a Geology Field Camp is taken as an elective course, additional courses must be taken to satisfy the General Education Capstone requirement as it cannot be counted in both sections.

Supplemental Requirements

CHEM 111 — Principles of Chemistry I 4
CHEM 112 — Principles of Chemistry II 4
MATH 141 — Plane Trigonometry 3
PHYS 201 — Elementary Physics I 3
PHYS 201A — Elementary Physics I Laboratory 1
PHYS 202 — Elementary Physics II 3
PHYS 202A — Elementary Physics II Lab 1
SCI 110 — Introduction to Scientific Computing 3

Supplemental Requirements Total 22

*Students planning to attend graduate school are strongly encouraged to take MATH 175, MATH 275 and Field Camp.
**Geology Field Camp may be used to meet the capstone requirement (ESS 499C) for the Geology Option, and must be taken off-campus at an accredited university.

Components of Degree Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
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<tbody>
<tr>
<td>General Education (Core, Distribution, Capstone)</td>
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<td>Prerequisites, Supplements, Special Electives</td>
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Geology Minor (Nonteaching)

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<th>Course Name</th>
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<tr>
<td>ESS 402</td>
<td>Integrated Biology, Mathematics &amp; Physical</td>
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<tr>
<td>PHYS 201</td>
<td>Physics, Engineering Technology, Space Systems</td>
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<td>ESS 350</td>
<td>Environmental Geology</td>
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<td>ESS 325</td>
<td>Earth Structure and Tectonics</td>
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<td>ESS 340</td>
<td>Oceans &amp; Atmospheres</td>
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<td>Biogeochemical Cycles</td>
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<tr>
<td>PHYS 201</td>
<td>Elementary Physics (Earth)</td>
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<tr>
<td>PHYS 201A</td>
<td>Elementary Physics (Space)</td>
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<td>SCI 402</td>
<td>Integrated Biology, Mathematics &amp; Physical</td>
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<td>Integrated Biology, Mathematics &amp; Science</td>
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Earth and Space Science - Teaching Option

General Education Core

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<th>Course Name</th>
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<tr>
<td>ASTR 125</td>
<td>Astronomical &amp; Physics to Explore the Universe</td>
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<td>CHEM 111</td>
<td>Principles of Chemistry I</td>
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<td>EDF 207</td>
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<td>EDF 211</td>
<td>Human Growth and Development</td>
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<td>Learning Theories and Assessment in Education</td>
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Program Requirements

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<td>ASTR 125</td>
<td>Astronomical &amp; Physics to Explore the Universe</td>
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<tr>
<td>CHEM 111</td>
<td>Principles of Chemistry I</td>
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<td>EDF 311</td>
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<tr>
<td>EDSE 230</td>
<td>Education of Exceptional Children</td>
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</tr>
<tr>
<td>ESS 108</td>
<td>Physical Geology</td>
<td>3</td>
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<td>ESS 303</td>
<td>Planetary Geology</td>
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<td>ESS 325</td>
<td>Earth Structure and Tectonics</td>
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<td>ESS 340</td>
<td>Oceans &amp; Atmospheres</td>
<td>3</td>
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<tr>
<td>ESS 350</td>
<td>Geomorphology</td>
<td>3</td>
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<td>ESS 440</td>
<td>Biogeochemical Cycles</td>
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<td>Elementary Physics (Earth)</td>
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<td>Integrated Biology, Mathematics &amp; Science</td>
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<td><strong>Field Experiences in Teaching</strong></td>
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Supplemental Requirements

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<tr>
<td><strong>Supplemental Requirements Total</strong></td>
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Integrated Science

Minor (Nonteaching)*

A total of 24 semester hours in Biological and Physical Sciences including:

- BIOL electives at 171 and above; and electives with ASTR, CHEM, ESS, or PHYS prefixes, with at least two courses at 201 or above.
- A minimum of 11 hours must be in eligible BIOL electives, and a minimum of 11 hours must be in eligible CHEM, ESS, or PHYS electives.

Space Science and Astrophysics

The program in Space Science is one of distinctively few such programs nationwide offered at the undergraduate level. The presence of the 21 Meter Morehead State University Space Tracking Antenna and Radio Telescope on campus and the availability of this extraordinary facility to our students and faculty for instruction and research provide a solid foundation for the program. Excellent faculty with diverse backgrounds in space related science and technology allow students to tap the full potential of our state-of-the-art facilities. The curriculum has been chosen to be rigorous but not too narrow or specialized. Graduates from the program will have a breadth of knowledge, experience, skills, and adaptability — the marketable tools of new and exciting professional careers in space science and the telecommunications industry.

The main goal of this program is to prepare its graduates for professional opportunities in applied technologies such as space system development and testing, satellite tracking and telemetry, and telecommunications electronics. The program provides a broad but sound education in the basic physical and mathematical sciences, as well as specialized instruction in astronomy, astrophysics, electronics, space systems, and satellite technology. Research opportunities in astrophysics, space systems, engineering, engineering technology, and telecommunications are also available through the Space Science program. Graduates of this program will be particularly well qualified to seek positions with NASA, aerospace companies, public and private science organizations, research facilities, colleges, planetaria, astronomical observatories, and in other commercial industries.

Program Competencies

The student will:
1. Develop the basic competencies in System Engineering and gain familiarity with the concepts and technologies associated with aerospace systems requirements, particularly spacecraft and related subsystems.

2. Learn how to use basic laboratory instrumentation and acquire skills that permit a rapid start in practical "real world" applications in the workplace.

3. Understand issues common to all radio frequency based communications systems, specify relevant system components, participate in design trade studies, perform field/laboratory work at the engineering technologist level, prepare technical reports including studies and analyses, and have sufficient preparation to be able to quickly assimilate new technical information.

4. Be prepared to enter the workforce as an entry level systems engineer or engineering technologist with the ability to integrate the knowledge gained in coursework with the necessary skills of self-direction and research/project pacing.

5. Have an understanding of semiconductor physics, atomic bonding, and crystal structures and imperfections that ultimately dictate the physical and mechanical properties of the materials. Students will also be familiar with processes leading to materials failure, such as thermal, radioactive, erosive, and corrosive degradations, as well as the corresponding protection approaches as related to the extreme conditions of the space environment.

6. Become familiar with a variety of government and commercial professional opportunities in addition to those in the space industry. These include opportunities in commercial satellite services, space commercial transportation services, space tourism, direct-to-home television, GPS telecommunications, electronics, technical marketing, electronic instrumentation, and defense technologies.

Assessment Procedures
Performance on the senior research or design project
Performance in individual courses
Acceptance rates into job market and/or graduate school

Bachelor of Science - Area of Concentration in Space Science
The Bachelor of Science degree in Space Science is an interdisciplinary degree program, and requires students to complete requirements in physics, mathematics, electricity-electronics-telecommunications technology, and astronomy-space science.

General Education - Core
ASTR 125 — Astronomical and Physical Methods to Explore the Universe (NSC2) 3
MATH 175 — Calculus I 4
SSE 499C — Senior Design Project II 3
General Education Total 37

Program Requirements
SSE 120 — Introduction to Satellites and Space Systems 3
SSE 122 — Satellites & Space Systems II 3
SSE 324 — Radio Astronomy 3
SSE 340 — Digital Control Systems for Space Applications 3
SSE 341 — Solid State Electronic Devices and Applications 3
SSE 360 — Advanced Space Systems 3
SSE 380 — Materials Science for Space Applications 3
SSE 431 — Space Plasma Physics 3
SSE 442 — RF/Microwave Systems and Antennas 3
SSE 498 — Senior Design Project I 2
*SSE 499C — Senior Design Project II 3
ITEC 141 — Direct Current Circuits 3
ITEC 241 — Alternating Current Circuits 3
ITEC 242 — Principles of Communications 3
ITEC 344 — Wireless Communications 3
ITEC 400 — Digital Signal Processing I 3
ITEC 444 — Satellite Communications 3
Program Requirements Total 47
*SSE 499C is counted in the general education requirements.

Supplemental Requirements
Mathematics
MATH 275 — Calculus II 4
MATH 276 — Calculus III 4
Math Requirement 8

Physics
PHYS 231 — Engineering Physics I 4
PHYS 231A — Engineering Physics I Laboratory 1
PHYS 232 — Engineering Physics II 4
PHYS 232A — Engineering Physics II Laboratory 1
PHYS 270 — Introduction to Scientific Computing 3
PHYS 361 — Fundamentals of Electronics 3
PHYS 381 — Computer Solutions to Engineering and Science Problems 3

Physics Requirement 19

Technical Electives
A minimum of six credit hours from the following:
ASTR 130 — Stars, Galaxies and Cosmology 3
*ASTR 311 — Astrophysics I: Stars and Stellar Evolution 3
*ASTR 312 — Astrophysics II: Galaxies and Cosmology 3
MATH 363 — Differential Equations 3
PHYS 332 — Electricity and Magnetism 4
ESS 303 — Planetary Geology 3
SSE 476 — Directed Research 1-3
SSE 299 — Selected Topics in Space Science 3
SSE 399 — Selected Topics 3
Technical Electives Requirement 6-7

Supplemental Requirements Total 33-34
*ASTR 311 requires prerequisite ASTR 130 and ASTR 312 requires prerequisite ASTR 311.

Components of Degree Requirements
General Education (Core, Distribution, Capstone) 37
Program Requirements 47
Astrophysics Option

The Department of Earth and Space Science, in conjunction with the Department of Math, Computer Science, and Physics, offer core and supplemental courses for the BS in Physics and Astrophysics Option.

**General Education - Core**
- MATH 175 — Calculus I
- ASTR 125 — Astronomical and Physics Methods to Explore the Universe (NSC2)
- ASTR 499C — Senior Thesis I
- ASTR 499D — Senior Thesis II

**General Education Total** 37

**Program Core Requirements**
- PHYS 231/PHYS 231A — Engineering Physics I
- PHYS 232/PHYS 232A — Engineering Physics II
- PHYS 270 — Introduction to Scientific Computing
- PHYS 340 — Experimental Physics
- PHYS 353 — Concepts of Modern Physics I
- PHYS 354 — Concepts of Modern Physics II
- PHYS 381 — Computer Solutions to Engineering and Science Problems
- MATH 275 — Calculus II
- MATH 276 — Calculus III
- MATH 363 — Differential Equations
- CHEM 111 — Principles of Chemistry I
- CHEM 112 — Principles of Chemistry II

**Program Core Requirements Total** 48

**Option IV Astrophysics Requirements**
- ASTR 130 — Stars, Galaxies, and Cosmology
- ASTR 311 — Astrophysics I: Stars and Stellar Evolution
- ASTR 312 — Astrophysics II: Galaxies & Cosmology
- ASTR 431 — Space Plasma Physics
- ASTR 460 — High Energy Astrophysics
- ASTR 498 — Senior Research
- PHYS 332 — Electricity and Magnetism
- PHYS 391 — Dynamics
- PHYS 493 — Quantum Mechanics
- ESS 303 — Planetary Geology
- PHYS 412 — Light and Optics
- ASTR 299 — Selected Topics in Astronomy
- SSE 299 — Selected Topics in Space Science
- SSE 399 — Selected Topics
- SSE 476 — Directed Research; or MATH 365 — Introduction to Mathematical Statistics

**Total Option Requirements** 35

**Components of Degree Requirements**
- General Education (Core, Distribution, Capstone) 37
- Program Core Requirements 48
- Astrophysics Requirements 35

**Total Degree Requirements** 120

Astronomy Minor

**Physics Sequence I:**
- PHYS 201 — Elementary Physics I
- PHYS 201A — Elementary Physics I Laboratory
- PHYS 202 — Elementary Physics II
- PHYS 202A — Elementary Physics II Laboratory

**Physics Sequence II:**
- PHYS 231 — Engineering Physics I
- PHYS 231A — Engineering Physics I Laboratory
- PHYS 232 — Engineering Physics II
- PHYS 232A — Engineering Physics II Laboratory

**Core Physics Requirement** 8-10
- ASTR 125 — Astronomical & Physics Methods to Explore the Universe
- ASTR 112 — Introductory Astronomy
- ASTR 311 — Astrophysics I: Stars and Stellar Evolution
- ASTR 312 — Astrophysics II: Galaxies and Cosmology

**Astronomy and Astrophysics Requirement** 12

**Supplemental Requirement (Minimum of one course)**
- ESS 303 — Planetary Geology
- ITEC 444 — Satellite Communications
- PHYS 324 — Radio Astronomy
- PHYS 350 — Nuclear Science
- PHYS 399 — Special Topics in Astrophysics
- PHYS 412 — Light & Physical Optics
- Supplemental Requirement 3

*Physics majors will take eight additional hours from the supplemental requirement list to substitute for the physics core required.*

**Total Requirement** 23-25

Department of Applied Engineering & Technology

Ahmad Zargari, Chair
210 Lloyd Cassity Building
606-783-2418

Faculty

Program Competencies
Associate of Applied Science

Students completing the program should be able to:
ITCM 101 — Structural Design  
ITCM 203 — Construction Methods and Equipment I  
ITCM 204 — Codes, Contracts and Specifications  
ITCM 205 — Estimating and Construction Costs  
ITCM 304 — Interpretation of Technical Drawings  
ITCM 307 — Hydrology  
ITCM 310 — Principles of Surveying  

Option 2: Electrical/Electronics Technology
General Education 15
Program Requirements 45

Components of Degree Requirement 60

Option Requirements 24
ITEC 215 — Basic Control Systems 3
ITEC 240 — Residential Wiring 3
ITEC 241 — Alternating Current Circuits (AC) 3
ITEC 242 — Principles of Communications 3
ITEC 244 — Fiber Optic Theory and Application 3
ITEC 245 — Digital Electronics 3
ITEC 342 — Electronic Devices and Circuits 3
ITEC 346 — Programmable Logic Controllers (PLC) 3

Option 3: Computer Aided Design & Graphic Technology
General Education 15
Program Requirements 45

Components of Degree Requirement 60

Select from the following list in consultation with advisor:
ITCD 203 — Computer Aided Design and Drafting II 3
ITCD 215 — Introduction to 3D Design and Modeling 3
ITCD 301 — Tool and Equipment Design 3
ITCD 305 — Residential Architectural Design 3
ITCD 315 — 3-D Design, Modeling and Animation 3
ITCG 102 — Graphic Arts I 3
ITCG 202 — Graphic Arts II 3
ITCG 302 — Offset Lithography 3
ITCG 303 — Computer Imaging and Illustration 3
ITCG 350 — Electronic Composition I 3

In addition to the course listed above, students may take six hours of elective credit from ITCM or ITMT areas.

Option 4: Manufacturing Technology
General Education 15
Program Requirements 45

Components of Degree Requirement 60

Option Requirements 24
IET 260 — Hydraulics and Pneumatics 3
ITEC 241 — Alternating Current Circuits (AC) 3
ITMT 106 — Thermoplastics Processing 3
ITMT 170 — Fundamentals of Robotics 3
ITMT 270 — Robotic Systems Engineering 3
ITMT 286 — Machine Tool Processes 3
ITMT 370 — Robotics Interfacing Engineering 3
ITMT 386 — NC-CNC Manufacturing Technology 3

Assessment Procedures
Exit Examinations
Survey of graduating students
Randomly administered alumni survey

Note: Students are required to obtain a grade of "C" in all technical and supplemental courses.

Associate of Applied Science in Industrial Technology

General Education 15
See general education requirements for the University.

The following specific general education requirements must be completed:
MATH 152 — College Algebra (or higher) 3
ENG 100 — Writing I 3
ENG 200 — Writing II 3
COMM 108 — Fundamentals of Speech Communication 3
Humanities 3
Social and Behavior 3

Students must complete a minimum of 42 semester hours in the area of Industrial Technology, of which 21 semester hours are the following core Industrial Technology course requirements. The other 24 semester hours will be selected from one of the following technical options: Computer Aided Design and Graphic Technology, Construction Management Technology, Electrical/Electronics Technology, Manufacturing Technology or Telecommunications and Computer Technology.

Core Requirements 21
IET 110 — Fundamentals of Computer Technology 3
IET 120 — Technology Systems 3
IET 300 — Technology and Society 3
ITCD 103 — Computer Aided Design and Drafting I 3
ITCM 101 — Introduction to Construction Technology 3
IETC 141 — Direct Current Circuits (DC) 3
ITMT 186 — Manufacturing and Fabrication 3

Option 1: Construction Management Technology
General Education 15
Program Requirements 42

Components of Degree Requirement 60
Option Requirements 21
ITCM 101 — Introduction to Construction Technology 3

1. Perform entry level technical occupations in business, industry, and service organizations.
2. Understand and apply theory and concepts of related disciplines to solve technical problems.
3. Apply concepts and skills developed in a variety of disciplines to successfully perform as technicians in the workforce.
4. Develop a field of specialization in one of the following areas: Computer Aided Design and Graphic Technology, Construction Management Technology, Electrical/Electronics Technology, Manufacturing Technology or Telecommunications and Computer Technology.
Option 5: Telecommunications and Computer Technology

General Education 15
Program Requirements 45
Components of Degree Requirements 60

Option Requirements 24
ITEC 144 — Network Fundamentals 3
ITEC 241 — Alternating Current Circuits (AC) 3
ITEC 242 — Principles of Communications 3
ITEC 244 — Fiber Optic Theory and Applications 3
ITEC 245 — Digital Electronics 3
ITEC 342 — Electronic Devices and Circuits 3
ITEC 344 — Wireless Communications 3
ITEC 345 — Microprocessor Electronics 3

Option 6: Industrial and Technical Education (ITE)

General Education 15
Program Requirements 45
Components of Degree Requirement 60

Option Requirements 24
CTE 185 — MOI (Methods of Instruction) in Career and Technical Education 3
CTE 207 — Foundations of Career and Technical Education 3
CTE 388 — Methods of Curriculum Development 3
CTE 393 — Methods of Career and Technical Education 3
CTE 394 — Practicum in Career and Technical Education 4
ITEC 396 — Evaluation in Career and Technical Education 3

Education
ITEC 141 — Direct Current Circuits 3
ITCM 202 — Structural Analysis 3
ITCD 103 — Computer-Aided Design and Drafting 3
ITMT 186 — Manufacturing and Fabrication 3

Choose 15 hours from the following:

PHYS 132/132A — Engineering Physics I 4
ITCD 315 — Parametric Modeling and Animation 3
ITCD 403 — Computer Aided Design of Mechanisms 3
ITCM 203 — Construction Methods and Materials I 3
ITCM 403 — Construction Methods and Materials II 3
ITCM 410 — Construction Surveying 3
ITCM 310 — Principles of Surveying 3
ITEC 241 — AC Circuits 3
ITEC 242 — Principles of Communications 3
ITEC 245 — Digital Electronics 3
ITEC 355 — Digital and Microcontroller Sys Design 3
ITEC 345 — Microprocessor Programming 3
ITEC 445 — Microprocessor Interfacing 3
ITEC 344 — Wireless Communication 3
ITEC 480 — Digital Communications and Networking 4
ITEC 400 — Digital Signal Processing 3
ITMT 270 — Robotics Systems Applications 3
ITMT 286 — Machine Tool Processes 3
Bachelor of Science in Engineering Technology

Program Competencies

Upon successful completion, the Engineering Technology graduates are expected to:

1. Apply scientific concepts to the solution of technological problems.
2. Apply theories, concepts and principles of related disciplines to develop the communication skills required for engineering technologists.
3. Perform as a technical professional in business, industry, education and government.
4. Apply concepts and skills developed in a variety of technical and professional disciplines including computer applications, materials properties, production processes, quality control, industrial design and safety.
5. Plan, facilitate, and integrate technology and problem solving techniques in the economic enterprise.
6. Engage in applied technical research to add to the knowledge of the discipline and to solve problems which surface in the workplace.

Assessment Procedures

With respect to the overall competencies of the program, the IET department will use senior exit examinations, senior capstone projects, surveys of graduating seniors, surveys of program alumni, and surveys of employers of engineering technology graduates. These various measures are meant to assess the degree to which education and training in the program serves the needs of our students, as well as the needs of employers.

Bachelor of Science - Engineering Technology

The program will provide students with the knowledge and understanding of more rigorous and analytical methods for technical problem solving in an industrial setting. The development of such competencies is essential to the preparation of skilled technical professionals who can undertake tasks requiring greater depth and understanding of advanced technology. The Engineering Technology program aims to prepare a group of graduates who will fill advanced engineering technology positions in business and industry. The main objectives of the program are: (1) to develop students with enhanced technological skills; and (2) to place these students in business, industry, and government as technical problem-solvers.

### Program Requirements

**General Education**

- IET 300 — Technology and Society (SBS2) 3
- IET 499C — Senior Project 3
- MATH 152 — College Algebra, MATH 174 — Pre-Calculus Mathematics, or MATH 175 — Calculus I 3

**General Education Total** 36-37

Refer to the General Education section for a complete listing of general education requirements for the University.

**Program Requirements**

- IET 110 — Fundamentals of Computer Technology 3
- IET 120 — Technology Systems 3
- IET 307 — Materials Science 3
- IET 310 — Engineering Economics Analysis 3
- IET 317 — Just In Time and Lean Systems 3
- IET 319 — Quality Control 3
- IET 320 — Industrial Project Management 3
- IET 330 — Industrial Design 3
- IET 419 — Total Quality Improvement 3
- IET 421 — Design of Experiments 3
- IET 422 — Industrial Safety Std. and Enforcement 3
- IET 430 — Facilities Management 3

**Program Requirements Total** 69

**Area of Specialization - Option**

(Choose 33 hours - 15 hours from 300 level or above) In consultation with the academic advisor, select from:

**Electronics & Computer Engineering Technology**

- ITEC 144 — Network Fundamentals 3
- ITEC 241 — AC Circuits 3
- ITEC 242 — Principles of Communications 3
- ITEC 245 — Digital Electronics 3
- ITEC 344 — Wireless Communications 3
- ITEC 345 — Microprocessor Electronics 3
- ITEC 445 — Computer Electronics 3
- ITEC 480 — Digital Communications and Networking 3

Select three of the following in consultation with advisor:

- ITEC 244, ITEC/SSE 341, ITEC 342, ITEC 346, ITEC 355, ITEC 355, ITEC 400, ITEC 444, ITEC 450

**Design & Manufacturing Engineering Technology**

- ITMT 270 — Robotics Systems Applications 3
- ITMT 370 — Robotics Interfacing Engineering 3
- ITMT 386 — NC-CNC Manufacturing Technology 3
- ITMT 488 — Flexible Manufacturing Engineering Technology 3
- ITCD 203 — Computer Aided Design and Drafting II 3
- ITCD 215 — Intro. to 3D Design and Modeling 3
- ITCD 301 — Tool and Equipment Design 3
- ITCD 315 — 3D Design, Modeling, and Animations 3

Select three of the following in consultation with advisor:

- ITMT 106, ITMT 470, ITMT 489, ITEC 241, ITEC 346, ITEC 403, ITCD 415, IET 260
### Construction Mngt. & Civil Engineering Technology

<table>
<thead>
<tr>
<th>Component of Degree Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education (Core, Distribution, Capstone)</td>
<td>36-37</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>69</td>
</tr>
<tr>
<td>Supplemental Requirements</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total Degree Requirements</strong></td>
<td><strong>125-126</strong></td>
</tr>
</tbody>
</table>

#### Assessment Procedures
- Exit examinations
- Capstone project
- Survey of graduating students
- Randomly administered survey of alumni and employers

**Note:** Students are required to obtain a grade of "C" in all technical and supplemental courses.

### Bachelor of Science in Industrial Education

**Upon completion of the program, the new teacher (student) will be able to:**

1. Teach technology courses in one of the following areas: Computer Aided Design and Graphic Technology, Construction Management Technology, Electrical/Electronics Technology, Manufacturing Technology or Telecommunications and Computer Technology.
2. Demonstrate competence in Kentucky’s new teacher standards.
3. Apply new teacher standards in S-12 technology education or secondary or postsecondary occupational based programs.

#### Assessment Procedures
- Exit Examinations
- Survey of graduating students
- Randomly administered alumni survey
- Capstone course

**Note:** Students are required to obtain a grade of "C" in all technical and supplemental courses.

### Area of Concentration

The student must complete the departmental and University general education requirements and a minimum of 39 semester hours of Industrial Education core requirements. **Note:** Industrial Education majors are required to have documented evidence of 2,000 clock hours of work experience for Career and Technical Education option, and 1,000 clock hours of work experience for Technology Education option. This work experience is to be directly related to their teaching areas. If this requirement has not been met prior to entering this degree program, it can be fulfilled by IET — 398: Supervised Work Experience, for three credit hours.

### Technical Option 1: Technology Education Area

#### General Education

- IET 300 — Technology and Society (SBS2) | 3 |
- IET 499C — Senior Project | 3 |
- MATH 152 — College Algebra (or higher) | 3 |

**General Education Total** | **36**

Refer to the General Education section for a complete listing of general education requirements for the University.

#### Program Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IET 307 — Materials Science</td>
<td>3</td>
</tr>
<tr>
<td>IET 317 — Just In Time and Lean Systems</td>
<td>3</td>
</tr>
<tr>
<td>IET 319 — Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>IET 320 — Industrial Project Management</td>
<td>3</td>
</tr>
<tr>
<td>IET 327 — Applied Industrial Management</td>
<td>3</td>
</tr>
<tr>
<td>IET 330 — Industrial Design</td>
<td>3</td>
</tr>
<tr>
<td>IET 419 — Total Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>IET 422 — Industrial Safety Std. and Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ITCD 103 — Computer Aided Design and Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>ITCM 101 — Introduction to Construction Technology</td>
<td>3</td>
</tr>
<tr>
<td>IETC 141 — DC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ITMT 186 — Manufacturing and Fabrication</td>
<td>3</td>
</tr>
<tr>
<td><strong>Option</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

**Program Requirements Total** | **72**

*Course requires admission into the Teacher Education Program*

#### Supplemental Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 101 — Introduction to Economics or</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201 — Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>IET 110 — Fundamentals of Computer Technology</td>
<td>3</td>
</tr>
<tr>
<td>IET 120 — Technology Systems</td>
<td>3</td>
</tr>
<tr>
<td>MATH 353 — Introduction to Higher Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

**Supplemental Requirements Total** | **12**

#### Components of Degree Requirement

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education (Core, Distribution, Capstone)</td>
<td>36</td>
</tr>
</tbody>
</table>
be taken for eight hours to complete necessary requirements. If the student is only working on the bachelor's degree, CTE 394 must be taken for an additional four hours at the Bachelor's level. If the student exiting the program in Technology Management will:

1. Apply scientific and technological concepts to solving technological problems;
2. Apply theories, concepts and principles of related disciplines to develop the communication skills required for technology managers;
3. Perform as a technical management professional in business, industry and government;
4. Apply concepts and skills developed in a variety of technical and professional disciplines including computer applications, materials properties, production processes, quality control, industrial design and safety;
5. Plan, facilitate, and integrate technology and problem solving techniques in the economic enterprise; and
6. Engage in applied technical research to add to the knowledge of the discipline and to solve problems which surface in the workplace.

Assessment Procedures
- Senior exit examinations
- Senior capstone projects
- Surveys of graduating seniors
- Surveys of program alumni
- Surveys of employers of Technology Management graduates

General Education Requirements
- MATH 152 — College Algebra (or equivalent) or higher
- IET 300 — Technology and Society (SBS2)
- IET 499C — Senior Project

General Education Total

Bachelor of Science in Technology Management

The 2+2 Technology Management program specifically targets Kentucky Community and Technical College System (KCTCS) associate-level graduates from technology-related programs and is intended as a "completer" program for associate degree graduates. Students must have graduated with an associate degree from the KCTCS with a technology-related degree. Such associate-level degree programs include: Computer Aided Drafting, Electrical/Electronics Technology, Machine Tool Technology, Applied Process Technology, Quality Management Systems, Manufacturing Systems Technology, Surveying and Mapping, Industrial Maintenance Technology, Wood Manufacturing Technology, Industrial Automation Technology, Industrial Chemical Technology, Instrumentation and Process Control, and Civil Engineering Technology. Students with other technology-related degrees not listed here from KCTCS or other community college systems may petition to qualify under this requirement.

This completer program admits KCTCS graduates who have completed KCTCS general education course requirements.

Program Competencies

1. Plan, facilitate, and integrate technology and problem solving techniques in the economic enterprise; and
2. Engage in applied technical research to add to the knowledge of the discipline and to solve problems which surface in the workplace.

Assessment Procedures
- Senior exit examinations
- Senior capstone projects
- Surveys of graduating seniors
- Surveys of program alumni
- Surveys of employers of Technology Management graduates

General Education Requirements
- MATH 152 — College Algebra (or equivalent) or higher
- IET 300 — Technology and Society (SBS2)
- IET 499C — Senior Project

General Education Total

*In addition to the above listed required courses, each student must completely satisfy the general education requirements (or their equivalent) for a bachelor's degree at Morehead State
University. Refer to the General Education section for a complete listing of general education requirements for the University.

Technology Management Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IET 307</td>
<td>Materials Science</td>
<td>3</td>
</tr>
<tr>
<td>IET 310</td>
<td>Engineering Economics Analysis</td>
<td>3</td>
</tr>
<tr>
<td>IET 317</td>
<td>Just in Time and Lean Systems</td>
<td>3</td>
</tr>
<tr>
<td>IET 319</td>
<td>Quality Science</td>
<td>3</td>
</tr>
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<td>IET 320</td>
<td>Industrial Project Management</td>
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<td>IET 422</td>
<td>Industrial Safety Std. and Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>IET 430</td>
<td>Facilities Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Requirements Total** 36

Supplemental Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IET 110</td>
<td>Fundamentals of Computer Technology</td>
<td>3</td>
</tr>
<tr>
<td>IET 120</td>
<td>Technology Systems</td>
<td>3</td>
</tr>
<tr>
<td>MATH 353</td>
<td>Introduction to Higher Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Elementary Physics I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Supplemental Requirements Total** 12

Components of Degree Requirement

General Education (Core, Distribution, Capstone) 36

Program Requirements 36

Supplemental Requirements 12

General Electives 36

**Total Degree Requirements** 120

Industrial Technology Minor

**Core Requirements** 9

Six hours from the following:
- ITCD 103 — Computer Aided Design and Drafting I
- ITCM 101 — Introduction to Construction Technology
- ITEC 141 — Direct Current Circuits (DC)
- ITMT 186 or ITMT 170

Select one course from the following:
- IET 120 — Technology Systems
- IET 300 — Technology and Society
- IET 319 — Quality Control
- IET 320 — Industrial Project Management
- IET 419 — Total Quality Improvement

**Option Requirements** 15

Chosen in consultation with minor advisor.

Choose from the following:
- ITCD, ITCM, ITEC, or ITMT option
- Technical Electives

**Total Hours Required** 24

**Department of Mathematics, Computer Science & Physics**

**Dora Ahmadi, Chair**
105 Lappin Hall
606-783-2930

**Faculty**

**Program Competencies**

The student exiting the programs in the mathematical sciences will:

1. Analyze and solve problems in the areas of algebra, analysis, statistics, and geometry. The student should be able to work individually and as a member of a team. Depending on the program emphasis, the student should possess the concept comprehension skills mentioned above at a sufficient level of expertise to function successfully as a teacher of mathematics, as a contributing member in business or industry, or as a graduate student pursuing an advanced degree in mathematics, statistics or computer science.

2. Use technology as an aid in the solution of problems. Specifically, the student should be able to write and effectively use programs for computers and graphing calculators.

3. Develop appropriate learning skills to foster the investigation of mathematical ideas and direct his/her own learning.

4. Communicate the mathematical ideas learned in the program to others. This ability should exist in both written and oral forms of communication.

**Assessment Procedures**

Senior capstone
Survey of graduates
Exit interviews
Major Field Achievement Test

**Bachelor of Science**

The Department of Mathematics, Computer Science, & Physics is committed to the education of students who intend (1) to teach mathematics at any level, (2) to apply mathematics, computer science or physics in industry or government, or (3) to use mathematical techniques and concepts in their chosen fields.

**Area of Concentration in Mathematics (Nonteaching)**

**General Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 175</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 499C</td>
<td>Senior Thesis I</td>
<td>2</td>
</tr>
<tr>
<td>MATH 499D</td>
<td>Senior Thesis II</td>
<td>1</td>
</tr>
</tbody>
</table>

**General Education Total** 37
Refer to the General Education section for a complete listing of general education requirements for the University.

### Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CS/MATH 170 — Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>MATH 275 — Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 276 — Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 300 — Introduction to Mathematical Proof</td>
<td>3</td>
</tr>
<tr>
<td>MATH 301 — Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 312 — Numerical Methods</td>
<td>3</td>
</tr>
<tr>
<td>MATH 350 — Introduction to Higher Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 363 — Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 365 — Introduction to Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 410 — Introduction to Real Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 481 — Math for Engineers and Scientists or MATH 355 — Operations Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 404 — Topology or</td>
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</tr>
<tr>
<td>MATH 486 — Complex Variables</td>
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</tr>
<tr>
<td>PHYS 232 — Engineering Physics II</td>
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<tr>
<td>PHYS 232A — Engineering Physics II Laboratory</td>
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</tbody>
</table>

**Total** | **44**

### Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education (Core, Distribution, Capstone)</td>
<td>37</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>44</td>
</tr>
<tr>
<td>General Electives</td>
<td>39</td>
</tr>
</tbody>
</table>

**Total Degree Requirements** | **120**

### Area of Concentration in Mathematics (Teaching)

#### General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 175 — Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 499C — Senior Thesis I</td>
<td>2</td>
</tr>
<tr>
<td>MATH 499D — Senior Thesis II</td>
<td>1</td>
</tr>
</tbody>
</table>

**General Education Total** | **37**

Refer to the General Education section for a complete listing of general education requirements for the University.

### Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
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<td>CS/MATH 170 — Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>MATH 275 — Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 276 — Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 300 — Introduction to Mathematical Proof</td>
<td>3</td>
</tr>
<tr>
<td>MATH 301 — Elementary Linear Algebra, or</td>
<td>3</td>
</tr>
<tr>
<td>MATH 308 — Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 350 — Introduction to Higher Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 353 — Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 365 — Introduction to Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 370 — College Geometry I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 371 — College Geometry II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 402 — Integrated Biology, Mathematics and Physical Science Teaching Methods</td>
<td>3</td>
</tr>
<tr>
<td>MATH 403 — Integrated Biology, Mathematics and Science Field Experiences in Teaching</td>
<td>3</td>
</tr>
<tr>
<td>MATH 410 — Introduction to Real Analysis</td>
<td>3</td>
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<tr>
<td>Electives</td>
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</tr>
</tbody>
</table>

(Mathematics courses at or above the 300-level, except for MATH 330 & 332, as approved by the department chair.)

**Program Requirements Total** | **48**

### Professional Education (Supplemental Requirements)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDF 207 — Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDF 211 — Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDF 311 — Learning Theories and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 416 — Clinical Practice</td>
<td>12</td>
</tr>
</tbody>
</table>

**Supplemental Requirements Total** | **30**

### Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
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<td>Program Requirements</td>
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<td>General Electives</td>
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</table>

**Total Degree Requirements** | **120**

### Major in Mathematics (Nonteaching)

#### General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 175 — Calculus I</td>
<td>4</td>
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<tr>
<td>MATH 499C — Senior Thesis I</td>
<td>2</td>
</tr>
<tr>
<td>MATH 499D — Senior Thesis II</td>
<td>1</td>
</tr>
</tbody>
</table>

**General Education Total** | **37**

Refer to the General Education section for a complete listing of general education requirements for the University.

### Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
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<td>3</td>
</tr>
<tr>
<td>MATH 353 — Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 365 — Introduction to Mathematical Statistics</td>
<td>3</td>
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<tr>
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</table>

(except MATH 330 & 332, as approved by the department chair.)

**Required Courses Total** | **32**

### Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
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<tbody>
<tr>
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<tr>
<td>General Electives</td>
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</table>

**Total Degree Requirements** | **120**

### Major in Mathematics (Teaching)

#### General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 175 — Calculus I</td>
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<tr>
<td>Electives</td>
<td>11</td>
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(except MATH 330 & 332, as approved by the department chair.)

**Required Courses Total** | **32**

### Components of Degree Requirement

<table>
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<th>Requirement</th>
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<td>General Education (Core, Distribution, Capstone)</td>
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<tr>
<td>Program Requirements</td>
<td>32</td>
</tr>
<tr>
<td>Minor</td>
<td>21</td>
</tr>
<tr>
<td>General Electives</td>
<td>30</td>
</tr>
</tbody>
</table>

**Total Degree Requirements** | **120**
### General Education Total
37

Refer to the General Education section for a complete listing of general education requirements for the University.

### Program Requirements

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>MATH 275</td>
<td>Calculus II</td>
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<tr>
<td>MATH 300</td>
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<td>College Geometry II</td>
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</tr>
<tr>
<td>MATH 402</td>
<td>Integrated Biology, Mathematics and</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Physical Science Teaching Methods</td>
<td></td>
</tr>
<tr>
<td>MATH 403</td>
<td>Integrated Biology, Mathematics and</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Science Field Experiences in Teaching</td>
<td></td>
</tr>
</tbody>
</table>

**Total** 32

In addition, the department strongly recommends that teaching majors complete MATH 276 and both Math 301 and 308.

### Professional Education (Supplemental Requirements)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDF 207</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSP 230</td>
<td>Education of Exceptional Children</td>
<td>3</td>
</tr>
<tr>
<td>EDF 211</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDF 311</td>
<td>Learning Theories and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 312</td>
<td>Education Methods and Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 483</td>
<td>Classroom Organ. &amp; Mgt for Sec Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDSE 416</td>
<td>Clinical Practice</td>
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**Supplemental Requirements Total** 30

### Components of Degree

<table>
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<tr>
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<tr>
<td>Program Requirements</td>
<td>32</td>
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<tr>
<td>Supplemental Requirements</td>
<td>30</td>
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<tr>
<td>Minor</td>
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**Degree Requirements Total** 120

### Mathematics Minor

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CS/MATH 170</td>
<td>Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>MATH 175</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 275</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>from MATH 174, 276, or other mathematics courses at or above the 300 level except MATH 330, 332, 353, 354, 402, and 403 as approved by the department chair</td>
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**Total** 25

### Statistics Minor

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Option 1: Noncalculus Option</td>
<td>Elective in Mathematics, from 152-199 level</td>
<td>3</td>
</tr>
<tr>
<td>MATH 301</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 353</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 355</td>
<td>Operations Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 455</td>
<td>Linear Statistical Models</td>
<td>3</td>
</tr>
<tr>
<td>MATH 453</td>
<td>Concepts in the Design of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>MATH 456</td>
<td>Nonparametric Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 21

### Computer Science

#### Program Competencies

**Students will:**

1. Have a firm understanding of computing from several points of view, such as hardware, functions, software engineering, network management, database management, operating system platforms, algorithm analysis, and programming languages.
2. Have a firm understanding of at least one high-level programming language, as well as experience with other languages and language structures.
3. Be able to function as a productive member of a software development team or in any other computer related capacity.
4. Be qualified to enter graduate studies in Computer Science.

#### Assessment Procedures

- Senior capstone
- Survey of graduates
- Exit interviews
- Major Field Achievement Test

### Bachelor of Science

The Department of Mathematics, Computer Science & Physics is committed to the education of students who intend (1) to apply mathematics and computer science in industry or government, or (2) to use mathematical and computer algorithms in their chosen fields.

### Computer Science Major (Nonteaching)

#### General Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 175</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CS 499C</td>
<td>Senior Thesis I</td>
<td>2</td>
</tr>
<tr>
<td>CS 499D</td>
<td>Senior Thesis II</td>
<td>1</td>
</tr>
</tbody>
</table>

**General Education Total** 37

Refer to the General Education section for a complete listing of general education requirements for the University.
**Program Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CS/MATH 170 — Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CIS 205 — C/C++ Programming I</td>
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</tr>
<tr>
<td>CS 303 — Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CS 310 — Algorithms and Advanced Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CS 360 — Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 380 — Software Engineering</td>
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</tr>
</tbody>
</table>

**Required Mathematics Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 275 — Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 308 — Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 353 — Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

*Choose three courses from the following: (Select two of the following courses with a CS prefix)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 335 — Theory of Programming Languages</td>
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</tr>
<tr>
<td>CS 372 — Math for Computer Games</td>
<td>3</td>
</tr>
<tr>
<td>CS 412 — Software Engineering for Computer Games</td>
<td>3</td>
</tr>
<tr>
<td>CS 420 — Data Mining Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CS 450 — Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CS 460 — Scientific and Parallel Computing</td>
<td>3</td>
</tr>
<tr>
<td>CS 472 — Multiplayer Networking Game Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 480 — Computer Security</td>
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</tr>
<tr>
<td>CS 485 — Network Security</td>
<td>3</td>
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</tbody>
</table>

*Select one course from the following:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CIS 305 — C/C++ Programming II</td>
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</tr>
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<td>CIS 314 — Java Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 405 — Web Dev Strategies and E-commerce</td>
<td>3</td>
</tr>
<tr>
<td>CIS 426 — Database Management Systems</td>
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<td>CIS 340 — Telecommunications and Networking</td>
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<td>CIS 442 — Network Administration</td>
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<td>CIS 443 — Advanced Computer Networking Adm.</td>
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<td>ITEC 345 — Microprocessor Electronics</td>
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<tr>
<td>ITEC 445 — Computer Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 480 — Digital Communications and Networking</td>
<td>3</td>
</tr>
<tr>
<td>MATH 301 — Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 312 — Numerical Methods</td>
<td>3</td>
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</tbody>
</table>

**Program Requirements Total** 38

**Components of Degree Requirement**

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>37</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>38</td>
</tr>
<tr>
<td>Minor</td>
<td>21</td>
</tr>
<tr>
<td>General Electives</td>
<td>24</td>
</tr>
</tbody>
</table>

**Degree Requirements Total** 120

**Computer Science Area**

**Area of Concentration in Computer Science**

**General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 175 — Calculus I</td>
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</table>

**General Education Total** 37

*Refer to the General Education section for a complete listing of general education requirements for the University.*

**Program Requirements (36 hours)**

**Core** 36

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 170 — Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CIS 205 — Introduction to Programming C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 426 — Database Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 303 — Data Structure</td>
<td>3</td>
</tr>
<tr>
<td>CS 310 — Algorithms and Adv. Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CS 335 — Theory of Programming Languages</td>
<td>3</td>
</tr>
<tr>
<td>CS 360 — Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 380 — Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201 &amp; 201A — Elementary Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202 &amp; 202A — Elementary Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 203 — Social Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Supplemental Courses (10 hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 275 — Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 308 — Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 365 — Intro. to Mathematical Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Option Requirements (21 hours)**

**A. Computer Science General Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 480 — Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS 340 — Telecommunications and Networking</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 345 — Microprocessor Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

*Select 12 hours from the following (9 hours must be from the CS prefix):*

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 312, CS 412, CS 420, CS 485, CS 450, CS 460, CS 470, CS 472, CS 372, CS 476, CIS 305, CIS 314, CIS 405, CS 442, CIS 443, ITEC 445, ITEC 480, MATH 276, MATH 301, MATH 312, PHYS 381</td>
<td>12</td>
</tr>
</tbody>
</table>

**B. Computer Gaming Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 172 — Computer Gaming Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CS 212 — Game Implementation Technique</td>
<td>3</td>
</tr>
<tr>
<td>CS 312 — Game Prototype Design and Implementation</td>
<td>3</td>
</tr>
<tr>
<td>CS 372 — Math for Computer Games</td>
<td>3</td>
</tr>
<tr>
<td>CS 412 — Software Engineering for Computer Games</td>
<td>3</td>
</tr>
<tr>
<td>CS 472 — Multiplayer Networking Game Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

*One of the following courses:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 450 — Computer Graphics or</td>
<td>3</td>
</tr>
<tr>
<td>CS 470 — Artificial Intelligence</td>
<td>3</td>
</tr>
</tbody>
</table>

**C. Computer and Networking Security Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 480 — Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>CS 485 — Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CS 420 — Data Mining Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MATH 320 — Codes and Cryptography</td>
<td>3</td>
</tr>
<tr>
<td>CIS 340 — Telecommunications and Networking</td>
<td>3</td>
</tr>
<tr>
<td>CIS 322 — Systems Security &amp; Information Assurance</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 345 — Microprocessor Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Components of Degree Requirement**

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>General Education (Core, Distribution, Capstone)</td>
<td>37</td>
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<tr>
<td>Program Requirements</td>
<td>46</td>
</tr>
<tr>
<td>Option Requirements</td>
<td>21</td>
</tr>
<tr>
<td>General Electives</td>
<td>16</td>
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</tbody>
</table>
Total Degree Requirements 120

Computer Science Minor

Required Courses
CS/MATH 170 — Introduction to Computer Science 4
CIS 205 — Introduction to Programming—C++ 3
CS 303 — Data Structures 3
CS 310 — Algorithms and Advanced Data Structures 3
Total 13

Elective courses 9
Choose three courses from the following:
At least two 300 or 400 level three-hour courses with CS prefix. At most, one elective chosen from CS Area of Concentration 300 level or above.
Total for Minor 22

Computer Gaming Minor

Required Courses
CS 172 - Computer Games Concepts 3
CS 212 - Game Implementation Technique 3
CS 312 - Game Prototype Design & Implementation 3
CS 372 - Math for Computer Games 3
CS 412 - Software Engineering for Computer Games 3
CS 472 - Multiplayer Networking Game Programming 3
One of the following courses:
CS 450 - Computer Graphics; or
CS 470 - Artificial Intelligence
Total for Minor 21

Physics

Program Competencies
The student will:
1. Have an understanding of the core concepts of physics.
2. Develop analytical skills and learning techniques to enable learning new areas of physics.
3. Read and understand technical literature and present oral reports.
4. Be able to function in a laboratory setting to both analyze data and write reports.
5. Be able to apply basic principles of physics in a problem solving situation such as carrying out a technical project.

Assessment Procedures
Performance of graduates on entrance examinations
Performance of graduates in professional schools
Survey of graduates
Survey of employers
Exit Exam

Bachelor of Science

Students planning to do graduate work in physics should follow requirements for the major. Students interested in a career in secondary physics teaching will find the requirements listed in the catalog under option 5 of the area.

Students desiring careers as professional physicists in industry, or in eventually pursuing graduate work in engineering or related fields, should follow requirements listed under the Area of Concentration in Applied Physics Options.

Physics Major

General Education
MATH 175 — Calculus I 4
PHYS 499C — Senior Thesis I 2
PHYS 499D — Senior Thesis II 1
General Education Total 37
Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements (Major)

Core Courses
CHEM 111 — Principles of Chemistry I 4
CHEM 112 — Principles of Chemistry II 4
PHYS 270 — Introduction to Scientific Computing 3
PHYS 231/231A — Engineering Physics I 5
PHYS 232/232A — Engineering Physics II 5
PHYS 340 — Experimental Physics 3
PHYS 353 — Concepts of Modern Physics I 4
PHYS 354 — Concepts of Modern Physics II 4
PHYS 361 — Fundamentals of Electronics 3
Total Core Requirements 34

Supplemental Requirements for the Major
MATH 275 — Calculus II 4
MATH 276 — Calculus III 4
MATH 363 — Differential Equations 3
Total Supplemental Requirements 11

Option Requirements (choose one)
Option I: Professional Physics (intended for students who wish to pursue graduate studies in Physics)
PHYS 332 — Electricity & Magnetism 4
PHYS 391 — Dynamics 3
PHYS 493 — Quantum Mechanics 3
Total Option I Requirements 10

Option II: Applied Physics (intended for students who wish to pursue careers or graduate/professional studies other than physics)
PHYS 350 — Nuclear Science 3
PHYS 411 — Thermodynamics 3
PHIL 300 — Philosophy of Science 3
Total Option II Requirements 9
Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
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<td>Program Requirements</td>
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<tr>
<td>Supplemental Requirements</td>
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<td>Option Requirements</td>
<td>9-10</td>
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<tr>
<td>Minor</td>
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<tr>
<td>General Electives</td>
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<td>Degree Requirements Total</td>
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</table>

Area of Concentration Options

Option 1: Computational Physics

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 175 — Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 499C — Senior Thesis I</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 499D — Senior Thesis II</td>
<td>1</td>
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</tbody>
</table>

General Education Total 37

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements (Area)

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHEM 111 — Principles of Chemistry I</td>
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</tr>
<tr>
<td>CHEM 112 — Principles of Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 270 — Introduction to Scientific Computing</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 353 — Concepts of Modern Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 354 — Concepts of Modern Physics II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 275 — Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 276 — Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 381 — Computer Solutions to Engineering and Science Problems</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 481 — Mathematics for Engineers and Scientists</td>
<td>3</td>
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</table>

Core Total Requirements 48

Option I: Computational Physics Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CS 170 — Introduction to Computer Science</td>
<td>4</td>
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<tr>
<td>CS 303 — Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>MATH 312 — Numerical Methods</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 391 — Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 411 — Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>CS 420 — Data Mining Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MATH, PHYS, CS, or SSE electives approved by advisor</td>
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</table>

Option I Requirements Total 48

Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
<td>37</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>48</td>
</tr>
<tr>
<td>Option I Requirements</td>
<td>25</td>
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<tr>
<td>Electives</td>
<td>10</td>
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</table>

Degree Requirements Total 120

Option 2: Engineering Physics (Mechanical)

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 175 — Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 499C — Senior Thesis I</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 499D — Senior Thesis II</td>
<td>1</td>
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</tbody>
</table>

General Education Total 37

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements (Area)

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 — Principles of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112 — Principles of Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 300 — Introduction to Scientific Computing</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 351 — Engineering Physics I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 352 — Engineering Physics II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 275 — Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 276 — Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 381 — Computer Solutions to Engineering and Science Problems</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 481 — Mathematics for Engineers and Scientists</td>
<td>3</td>
</tr>
</tbody>
</table>

Core Total Requirements 48

Option II: Engineering Physics (Mechanical) Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 221 — Statics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 391 — Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 411 — Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>IET 307 — Materials Science</td>
<td>3</td>
</tr>
<tr>
<td>IET 260 — Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>ITMT 186 — Manufacturing and Fabrication</td>
<td>3</td>
</tr>
<tr>
<td>ITEC, MATH, PHYS, or SSE electives approved by advisor</td>
<td>6</td>
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</tbody>
</table>

Option II Requirements Total 24

Components of Degree Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
<td>37</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>48</td>
</tr>
<tr>
<td>Option II Requirements</td>
<td>24</td>
</tr>
<tr>
<td>Electives</td>
<td>11</td>
</tr>
</tbody>
</table>

Degree Requirements Total 120

Option 3: Engineering Physics (Electrical)

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 175 — Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 499C — Senior Thesis I and</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 499D — Senior Thesis II</td>
<td>1</td>
</tr>
</tbody>
</table>

General Education Total 37

Refer to the General Education section for a complete listing of general education requirements for the University.
**Program Requirements (Area)**

**Core Courses**
- CHEM 111 — Principles of Chemistry I 4
- CHEM 112 — Principles of Chemistry II 4
- PHYS 270 — Introduction to Scientific Computing 3
- PHYS 231/231A — Engineering Physics I 5
- PHYS 232/232A — Engineering Physics II 5
- MATH 275 — Calculus II 4
- MATH 276 — Calculus III 4
- PHYS 340 — Experimental Physics 3
- PHYS 353 — Concepts of Modern Physics I 4
- PHYS 354 — Concepts of Modern Physics II 4
- MATH 363 — Differential Equations 3
- PHYS 381 — Computer Solutions to Engineering and Science Problems 3
- PHYS 481 — Mathematics for Engineers and Scientists 3

**Core Total Requirements** 48

**Option III: Engineering Physics (Electrical) Requirements**
- PHYS 332 — Electricity and Magnetism 4
- PHYS 361 — Fundamentals of Electronics 3
- PHYS 411 — Thermodynamics 3
- ITEC 241 — AC Circuits 3
- ITEC 242 — Principles of Communications 3
- ITEC 342 — Electronic Devices and Circuits 3
- ITEC, MATH, PHYS, or SSE electives approved by advisor 6

**Option III Requirements Total** 25

**Components of Degree Requirement**
- General Education 37
- Program Requirements 48
- Option III Requirements 25
- Electives 10

**Degree Requirements Total** 120

**Option 4: Astrophysics**
The Department of Math, Computer Science and Physics, in conjunction with the Department of Earth and Space Science, offer core and supplemental courses for the BS in Physics and Astrophysics Option.

**Option 5: Physics Teaching**

**General Education**
- MATH 175 — Calculus I 4
- PHYS 499C — Senior Thesis I and 2
- PHYS 499D — Senior Thesis II 1

**General Education Total** 37

Refer to the General Education section for a complete listing of general education requirements for the University.

**Program Requirements (Area)**

**Core Courses**
- CHEM 111 — Principles of Chemistry I 4
- CHEM 112 — Principles of Chemistry II 4
- PHYS 270 — Introduction to Scientific Computing 3
- PHYS 231/231A — Engineering Physics I 5
- PHYS 232/232A — Engineering Physics II 5
- MATH 275 — Calculus II 4
- MATH 276 — Calculus III 4
- PHYS 340 — Experimental Physics 3
- PHYS 353 — Concepts of Modern Physics I 4
- PHYS 354 — Concepts of Modern Physics II 4
- MATH 363 — Differential Equations 3
- PHYS 381 — Computer Solutions to Engineering and Science Problems 3
- PHYS 481 — Mathematics for Engineers and Scientists 3

**Core Total Requirements** 48

**Option V: Physics Teaching Requirements**
- PHYS 109 — History of the Universe, or 3
- ASTR 125 — Methods to Explore the Universe 3
- PHYS 411 — Thermodynamics 3
- SCI 402 — Integrated Biology, Math and Physical Science Teaching Methods 3
- SCI 403 — Integrated Biology, Mathematics and Physical Sciences Field Experiences in Teaching 3

**Option V Requirements Total** 12

**Education Requirements for Teaching Option**
- EDF 207 — Foundations of Education 3
- EDF 211 — Human Growth and Development 3
- EDF 311 — Learning Theories and Assessment in Education 3
- EDSE 312 — Educational Methods and Technology 3
- EDSE 416 — Clinical Practice 12
- EDSP 230 — Education of Exceptional Children 3

**Education Requirements Total** 30

To achieve state certification for teaching physics, the requirements for a secondary education certificate as listed by the College of Education must be satisfied. For other requirements for certification, see the College of Education section elsewhere in the catalog and an advisor in the College of Education.

**Components of Degree Requirement**
- General Education 37
- Program Core Requirements 48
- Option V and Education Requirements 42

**Degree Requirements Total** 120

**Physics Minor**
- PHYS 231 — Engineering Physics I 4
- PHYS 231A — Engineering Physics I Laboratory 1
- PHYS 232 — Engineering Physics II 4
- PHYS 232A — Engineering Physics II Laboratory 1
- PHYS 350 — Nuclear Science 4
- PHYS — electives, approved by advisor 7

**Total** 21

*At least 50 percent of the coursework in the major, area, or minor in physics must be taken in residency.
Many employers of engineers are interested in dual-degree programs for both degrees are met. An advisor in the selected major to ensure that requirements are understood. All engineering schools require specific general education courses in the social sciences and humanities. A list of MSU courses which meet UK University Studies requirements is available from the pre-engineering advisor. Students transferring to other engineering schools should contact their advisors before selecting specific courses.

### Department of Psychology

**Laurie Couch, Interim Chair**  
408 Reed Hall  
606-783-2981

**Faculty**  
J. Blackledge, D. Butz, L. Couch (Interim Chair), L. Haller, S. Kidwell, D. Olson, S. Reilley, G. Remillard, I. White, W. White

**Program Competencies**

**Students should:**

1. Understand the complexity of human and animal behavior and the influence of psychological, biological, and social factors on behavior.

2. Be competent in psychological research methods including experimental design, data analysis and presentation, report writing, and computer utilization.

3. Understand the methods and knowledge base of six core content areas of psychology.

4. Understand the principle tenets and major theoretical characteristics of major systems in psychology.

**Additional competencies for the Area of Concentration in Psychology include one or more of the following:**

1. Develop additional knowledge of specialized research areas of psychology.

2. Develop additional knowledge and skills in psychological research design and analysis.

3. Develop practical and theoretical competencies in areas of applied psychology.

**Assessment Procedures**

- Senior capstone course
- Exit examination

**Bachelor of Science in Psychology**

The purpose of the psychology major is to provide students, within a liberal arts tradition, with a broad base of skills and knowledge of scientific psychology, and its applications. The purpose of the area of concentration in psychology is to extend the foundation provided by the major by allowing students to seek additional training in specialized areas of psychology, and to gain hands-on experience in basic and applied psychology through practicums, cooperative educational experiences, and directed research with faculty.

**Major in Psychology**

### General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 499C</td>
<td>Systems and Theories</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Total**  
36

---

### Pre-Engineering

**Faculty**  
I. Birriel, J. Birriel, K. Price, C. Yess

**Three-Two Program (Dual Degree)**

The student completes three years (96 hours), which includes the courses listed in the Three-Two program of study and the MSU bachelor’s degree requirements before transferring to an engineering college to complete the final two years of specialty. Upon completing work at both schools, the student receives dual degrees: a Bachelor of Science degree from Morehead State University and a Bachelor of Science degree in engineering from the college of engineering. A student must complete an MSU major and minor, and the MSU general education requirements. A student choosing the physics, mathematics or chemistry option has the requirement of at least four additional courses in the chosen option. Advisors can supply additional details. Because colleges of engineering require a substantial background in physics, mathematics, and chemistry, students in the three-two program normally major in one of these areas. Students wishing to major in some other area should work closely with the pre-engineering advisor and an advisor in the selected major to ensure that requirements for both degrees are met.

Many employers of engineers are interested in dual-degree graduates because of their stronger science and mathematics problem solving skills, their better communication skills, and their broader liberal arts training. Dual degree holders are better prepared to solve unusual engineering problems and to deal with the ethical and social impact of engineering activities.

**Two-Two Program (Transfer)**

The student spends two years of study in pre-engineering at MSU and then transfers to a college of engineering to complete a Bachelor of Science degree in an engineering field.

**Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
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<tbody>
<tr>
<td>CHEM 111</td>
<td>Principles of Chemistry I</td>
<td>4</td>
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<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
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<tr>
<td>COMM 108</td>
<td>Fundamentals of Speech Comm.</td>
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<tr>
<td>ENG 100</td>
<td>Writing I</td>
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<tr>
<td>ENG 200</td>
<td>Writing II</td>
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<tr>
<td>MATH 175</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 275</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 276</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 363</td>
<td>Differential Equations</td>
<td>3</td>
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<tr>
<td>PHYS 231</td>
<td>Engineering Physics I</td>
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<tr>
<td>PHYS 231A</td>
<td>Engineering Physics I Laboratory</td>
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<tr>
<td>PHYS 232</td>
<td>Engineering Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232A</td>
<td>Engineering Physics II Lab.</td>
<td>1</td>
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</table>

Select two courses from the following:

- MATH 260 — FORTRAN Programming  
- PHYS 221 — Statics  
- PHYS 411 — Thermodynamics  

<table>
<thead>
<tr>
<th>Total</th>
<th>48</th>
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</table>

| *General Education Courses | 16 |

*All engineering schools require specific general education courses.
Refer to the General Education section for a complete listing of general education requirements for the University.

**Program Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tr>
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**Program Requirements Total** | **36**

**Components of Degree Requirements**

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**Area of Concentration in Psychology**

**General Education Requirements**

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**General Education Total** | **36**

**Program Requirements**

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**Program Requirements Total** | **48**

**Components of Degree Requirements**

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<td><strong>Degree Requirements Total</strong></td>
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</table>
The Department of Health, Wellness & Human Performance offers general education courses, majors in health and physical education, areas of concentration in exercise science health promotion, and health and physical education and a minor in health promotion. An Associate of Applied Science degree is offered in respiratory care therapy. The general education courses are for all students.

Students selecting a major in health and/or physical education will be required to complete admissions assessments as well as exit examinations covering knowledge and competencies of their programs. Results of these assessments are used for individual guidance and program development. Students should check with their advisors to be certain that they comply with all requirements.

Health Program Competencies

**Students completing the program are:**

1. To be familiar with the components and functions of each facet of a comprehensive school health or health promotion program.
2. To communicate effectively, including the ability to write objectives which address the three domains of education (cognitive, affective, and psychomotor).
3. To be able to effectively plan, implement, and evaluate teaching units including various teaching strategies and/or methodologies which address the 75 defined learner outcomes identified in the Kentucky Educational Reform Act.
4. To be cognizant of the various types of learners, and the learning strategies/methodologies which will address the needs to each learner classification.
5. To develop educational units that encourage cross disciplinary integration.
6. To develop critical thinking and problem solving skills.
7. To serve as a facilitator, health advocate, and resource professional for current and future issues in the profession of health for students, teachers, administrators, and the community.
8. To identify and effectively utilize appropriate resources pertaining to health.
9. To be familiar with professional organizations, current trends, and issues relevant to health.

10. To develop classroom skills that will be conducive to the successful accumulation of knowledge and illustrate the applicability to real world situations.
11. To successfully develop measurement and evaluation instruments which will assess the health needs of the student as well as effectiveness of instruction.
12. To effectively disseminate objective, non-biased health information and activities which will provide the student the opportunity to formulate personal values concerning health-related issues.
13. To become familiar with and develop the skills identified within the competencies/responsibilities of an entry-level health educator.

**Assessment Procedures**

- Portfolios
- Certification examination
- Employment data
- External evaluation practicum/field experiences
- PRAXIS Content Area Exams
- PRAXIS PLT Exam
- Dispositions Assessment

**Bachelor of Arts**

The health major and minor programs prepare individuals for positions in any of the five recognized work settings for health educators — school, community, college/university, worksite, or medical.

**Health Promotion Major**

**General Education**

<table>
<thead>
<tr>
<th>Course</th>
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**General Education Total**

36

Refer to the General Education section for a complete listing of general education courses and requirements for the University.

**Program Requirements**

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<tr>
<th>Course</th>
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<td>HPE 160</td>
<td>Foundations of Health and Physical Education</td>
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<td>HLTH 205</td>
<td>Psychological Health</td>
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<td>HLTH 206</td>
<td>Principles of Nutrition</td>
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<td>HLTH 310</td>
<td>Health and Wellness Promotion</td>
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<td>HLTH 360</td>
<td>Family Health</td>
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<td>HLTH 408</td>
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<td>HLTH 475</td>
<td>The School Health Program</td>
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<tr>
<td>HLTH 414</td>
<td>Principles of Epidemiology</td>
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<td>HLTH 418</td>
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<td>HLTH 425</td>
<td>Planning, Managing and Evaluating</td>
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<td>HLTH 435</td>
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**Program Requirements Total**

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Supplemental Requirements

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**Supplemental Requirements Total** 36

Components of Degree Requirement

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**Degree Requirements Total** 120

Area of Concentration in Health Promotion

**General Education**

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**General Education Total** 36

*Refer to the General Education section for a complete listing of general education courses and requirements for the University.*

Program Requirements

<table>
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Supplemental Requirements

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Components of Degree Requirement

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**Degree Requirements Total** 120

Health Minor

**Required Core**

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<td>HLTH 206 — Principles of Nutrition</td>
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<td>HLTH 230 — Community Health</td>
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<td>HLTH 414 — Use and Abuse of Drugs</td>
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**Required Core Total** 12

*Choose three courses (nine hours) from the following:*

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<td>HLTH 205 — Psychological Health</td>
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<td>HLTH 430 — Consumer Health</td>
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<td>HLTH 435 — Health Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 475 — The School Health Program</td>
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</tr>
</tbody>
</table>

**Minor Total** 21

Bachelor of Arts - Health and Physical Education Teaching

**Program Competencies**

**Students will demonstrate:**

1. An understanding and working knowledge of discipline specific content.
2. An understanding of general knowledge from other disciplines which can be applied to the discipline.
3. Experiences and opportunities to develop the skills and techniques (including technology) needed to ensure the effective delivery of content to students in developmentally appropriate ways.
4. Knowledge and activities designed to promote sensitivity to and accountability for diverse learner populations.
5. An understanding of and experience using the skills needed for effective classroom management.
6. The skills needed to design, implement, and evaluate student assessments.
7. Knowledge and skills to participate in an interdisciplinary approach to education.
8. Knowledge and skills needed to effectively select and utilize a variety of technical and human resources to augment the learning process.
9. Opportunities to implement Kentucky Education Reform Act initiatives and to be assessed in regard to the effective delivery (KTIP guidelines) of the same in a variety of preservice practice teaching activities.

**Assessment Procedures**

- Teacher Performance Assessment
- PRAXIS Content Area Exam(s)
- PRAXIS PLT Exam
- Disposition assessment

Area of Concentration in P-12 Health and Physical Education

**General Education**

<table>
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<th>Course</th>
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EDF 211 — Human Growth and Development (SBS2) 3
HPE 499C — Senior Seminar in Health/Physical 3
Education Teaching
General Education Total 36

Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Program Requirements
HLTH 151 — Wellness: Theory in Action 3
HLTH 203 — Safety and First Aid 3
HLTH 205 — Psychological Health 3
HLTH 206 — Principles of Nutrition 3
HLTH 360 — Family Health 3
HLTH 418 — Use and Abuse of Drugs 3
HLTH 475 — The School Health Program 3
HPE 160 — Foundations of Health and Physical Education 3
Education
HPE 300 — Methods of Teaching Elem Physical Ed 3
HPE 301 — Classroom Assessment in Health/Physical Education Teaching
HPE 302 — Methods of Teaching Elem Health 3
HPE 303 — Methods of Teaching Secondary Phys Ed 3
HPE 304 — Methods of Teaching Secondary Health 3
PHED 212 — Games & Rhythms for Elem Teachers 3
PHED 213 — Methods of Individual Sports 1
PHED 214 — Methods of Racket Sports 1
PHED 215 — Methods of Team Sports 1
PHED 216 — Methods of Lifetime Sports 1
PHED 217 — Methods of Gymnastics & Martial Arts 1
PHED 218 — Methods of Dance 1
PHED 306 — Functional Anatomy/Biomechanics 3
PHED 315 — Motor Development and Learning 3
PHED 430 — Psychosocial Dimensions of Sport 3
PHED 432 — Physiology of Exercise 3
PHED 475 — Adapted Physical Education 3
Program Requirements Total 63

Supplemental Requirements (Professional Education Core)
EDF 207 — Foundations of Education 3
EDF 311 — Learning Theories and Assessment in Education 3
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Mngt. for Secondary Teachers
Supplemental Requirements Total 24

Components of Degree Requirement
General Education 36
Program Requirements 63
Supplemental (Professional Education Core) 24
Degree Requirements Total 123

Students must be admitted to the TEP before taking restricted courses in professional education (EDF 311, EDSE 312, EDSE 483, EDSE 416) or in Health and Physical Education Teacher Education (HPE 300, HPE 302, HPE 303, HPE 304, and HPE 499C).

Bachelor of Arts Health Education Teaching P-12
A minor is needed for this program.

General Education
HLTH 230 — Community Health (SBS1) 3
EDF 211 — Human Growth and Development (SBS2) 3
HPE 499C — Senior Seminar in Health/Physical Education Teaching
General Education Total 36

Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Program Requirements
HLTH 151 — Wellness: Theory in Action 3
HLTH 203 — Safety and First Aid 3
HLTH 205 — Psychological Health 3
HLTH 206 — Principles of Nutrition 3
HLTH 360 — Family Health 3
HLTH 418 — Use and Abuse of Drugs 3
HLTH 475 — School Health Program 3
HPE 160 — Foundations of Health & Physical Education 3
HPE 301 — Classroom Assessment in Health & Phys Ed 3
HPE 302 — Methods of Teaching Elem Health 3
HPE 304 — Methods of Teaching Elem Phys Ed 3
Program Requirements Total 33

Supplemental Requirements (Professional Education Courses)
EDF 207 — Foundations of Education 3
EDF 311 — Learning Theories and Assessment in Ed 3
EDSE 312 — Educational Methods and Technology 3
EDSP 230 — Teaching the Exceptional Student or
PHED 475 — Adapted Physical Ed 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Management for Secondary Teachers
Supplemental Requirements Total 27

Components of Degree Requirement
General Education 36
Supplemental (Professional Education Core) 27
Minor 21
Elective 3
Degree Requirements Total 120

Bachelor of Arts Physical Education Teaching P-12
A minor is needed for this program.

General Education
EDF 211 — Human Growth and Development (SBS2) 3
HPE 499C — Senior Seminar in Health/Physical Education Teaching
General Education Total 36
Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Program Requirements
HLTH 151 — Wellness: Theory in Action 3
PHED 212 — Games and Rhythms for Elementary Teachers 3
PHED 213 — Methods of Teaching Individual Sports 1
PHED 214 — Methods of Teaching Racket Sports 1
PHED 215 — Methods of Teaching Team Sports 1
PHED 216 — Methods of Teaching Lifetime Sports 1
PHED 217 — Methods of Teaching Gymnastics and the Martial Arts 1
PHED 218 — Methods of Teaching Dance 1
PHED 306 — Functional Anatomy/Biomechanics 3
PHED 315 — Motor Development and Motor Learning 3
PHED 430 — The Psychosocial Dimensions of Sport and Physical Activity 3
PHED 432 — Physiology of Exercise 3
PHED 475 — Adapted Physical Education 3
HPE 160 — Foundations of Health & Physical Education 3
HPE 300 — Methods of Teaching Elementary PE 3
HPE 301 — Classroom Assessment in Hlth & Phys Ed 3
HPE 303 — Methods of Teaching Secondary PE 3

Supplemental Requirements Total 39

Supplemental Requirements (Professional Education Courses)
EDF 207 — Foundations of Education 3
EDF 311 — Learning Theories and Assessment in Ed 3
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Management 3

Program Requirements Total 36

Components of Degree Requirement
General Education 36
Program Requirements 39
Supplemental (Professional Education Core) 24
Minor 21

Degree Requirements Total 120

Exercise Science
Bachelor of Science Program Competencies
Students will demonstrate:
1. Knowledge and understanding of the biological and applied sciences which lay the foundation for this area of study.
2. Knowledge and ability to measure and assess physical wellness.
3. Ability to design, support, and evaluate individuals in fulfilling programs designed to promote improved wellness.
4. Ability to develop, teach and assess exercise skills and activities.
5. Ability to develop, promote, administer and evaluate a variety of wellness programs.

Assessment Procedures
- Portfolios
- ACSM HFI Exam
- Employment Data
- Internship Data

Exercise Science Area of Concentration

General Education
PHED 499D — Senior Capstone 3

General Education Total 36

Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Program Requirements
HLTH 151 — Wellness: Theory in Action 3
BIOL 234 — Human Anatomy & Physiology 3
BIOL 235 — Anatomy and Physiology II 3
HLTH 203 — Safety and First Aid 3
HLTH 206 — Prin. of Nutrition or NUTR 201 3
HLTH 310 — Health and Wellness Promotion 3
HPE 160 — Foundations of Health and Physical Ed 3
PHED 205 — Lifetime Fitness 3
PHED 220 — Athletic Training 3
PHED 301 — Evaluation in Exercise Science 3
PHED 306 — Functional Anatomy & Biomechanics 3
PHED 315 — Motor Development and Motor Learning 3
PHED 326 — Exercise Program Leadership 3
PHED 332 — Principles of Strength and Conditioning 3
PHED 423 — Exercise Management of Special Populations 3
PHED 424 — Principles of Therapeutic Exercise 3
PHED 432 — Physiology of Exercise 3
PHED 441 — Exercise Testing and Prescription 4
PHED 450 — Planning and Managing Exercise Programs 3
CHEM 101 — Survey of Chemistry or PHYS 201 — Elementary Physics I 4
CHEM 111 — Principles of Chemistry I 3
SCI 103 — Introduction to Physical Sciences or PHYS 201 — Elementary Physics I 3

Choose two courses (six hours) from the following listing:
- PHED 453A — Corporate Internship 3
- PHED 453B — Cardiopulmonary Rehabilitation Internship 3
- PHED 453C — Musculoskeletal Rehabilitation Internship 3

Program Requirements Total 78

Components of Degree Requirements
General Education 36
Program Requirements 78
General Electives 6

Degree Requirements Total 120
Associate of Applied Science in Respiratory Care

Program Competencies

**The graduate will be able to:**
1. Communicate effectively.
2. Think critically.
3. Learn independently.
4. Examine relationships in diverse and complex environments.
5. Perform cardiopulmonary diagnostic procedures, patient assessment and respiratory care planning.
6. Administer therapeutic and life support procedures in the management of patients with cardiopulmonary impairment.
7. Evaluate appropriateness of prescribed respiratory care and recommend modifications where indicated.
8. Select, assemble, check, correct malfunctions and assure cleanliness and calibration of respiratory care equipment.
9. Maintain an ethical and effective relationship with the health care team.
11. Demonstrate an awareness of organizational and management principles related to respiratory care.
12. Perform and act on the results of advanced patient assessment techniques.
13. Assist the physician in special procedures of cardiopulmonary care.
14. Demonstrate skills and attitudes needed to maintain professional and technical competence.

Assessment Procedures

- Employment
- Evaluation by Advisory Committee

Admission Requirements and Procedures

The AAS in Respiratory Care program has a selective admission procedure. Enrollment in the program is limited. In the event there are more qualified applicants than available positions, students with the highest GPA will be accepted.

Application Procedure

1. Be unconditionally admitted to MSU.
2. Declare Respiratory Care as an area of concentration.
3. Enroll in required pre-respiratory care courses as outlined in the respiratory care curriculum sequence.
4. Submit a completed application packet to the Associate of Applied Science in Respiratory Care Program. The application packet includes:
   a. Application for admission to Respiratory Care Program.
   b. ACT scores or equivalent.
   c. Official transcripts of all postsecondary work course.
   d. Official high school transcript or GED certificate.
   e. University/undergraduate catalog(s) if transfer credit is sought.
   f. Course syllabi for all respiratory care courses completed if transfer credit is sought.
   g. Verification of health and physical capabilities by completing health form provided by departments.
   h. Prior to admission into the Respiratory Care Program, students are required to complete BIOL 234, CIS 101, ENG 100, MATH 135, and MSU 101.
   i. Documentation of attendance at a predmission conference or meeting with the program coordinator.
   j. Documentation of observation hours.
5. Student selection process occurs in the Fall Semester preceding Spring admission.
6. To be considered for official admission to the Respiratory Care Program, all materials except the health form must be submitted to the address listed before Nov. 15 preceding Spring admission.

Admission Criteria

**Applicants to the Respiratory Care Program are selected based upon the following criteria:**

1. American College Test (Enhanced ACT) scores or equivalent.
2. GED validation, if applicable. Preference will be given to a standard score of 50 or above.
3. Past performance in college/university: must have a GPA of 2.5 on a scale of 4.0 for all college level courses completed and a grade of "C" or better on BIOL 234 and MATH 135.
4. Health and physical capability requirements are documented by the completion of the required Health Form by a licensed physician(s), a physician assistant or a nurse practitioner upon completion of a thorough physical examination.
5. Respiratory courses will be taken at the Rowan campus on Monday, Wednesday and Friday.

Admission procedures are reviewed on an annual basis. It is the applicant’s responsibility to verify prior to the application deadline that the procedures/criteria have not been revised.
Conditions for Enrollment
1. Students may be assigned to clinical practicum areas other than those in the immediate Rowan County area, requiring traveling some distance from campus. Transportation to and from these settings is the responsibility of the student.
2. Clinical experiences and formal lectures may be required during various hours of the day, evening and night.
3. Students have the responsibility for the cost incurred by enrollment in the Associate of Applied Science degree in Respiratory Care Program. This cost may include clothing, equipment, malpractice insurance and academic materials.
4. Respiratory courses will be taken at the Rowan campus on Monday, Wednesday and Friday.

Requirements for AAS Students
A total of 72 credit hours is required for the AAS degree that includes 32 credit hours of general education courses. The student will be required to complete the course sequence approved by the University and in place at the time of admission to the Associate Degree Respiratory Care Program. AAS in Respiratory Care program policies on challenge examination, transfer credit, academic standards and progression and criteria for taking the National Board for Respiratory Care examination can be obtained from the Department of Nursing.

General Education
MATH 135 - Mathematics for Technical Students 3 (or higher)
*General Education Total 18
*It is recommended that students complete either PSY 154 or SOC 101.
Refer to the General Education section for a complete listing of general education requirements.

Program Requirements
RCP 110 — Cardiopulmonary Anatomy and Physiology 3
RCP 120 — Theory and Principles of Respiratory Care 4
RCP 130 — Pharmacology 3
RCP 125 — Cardiopulmonary Evaluation 4
RCP 150 — Clinical Practice I 2
RCP 175 — Clinical Practice II 3
RCP 180 — Ventilatory Support 3
RCP 190 — Advanced Ventilatory Support 2
RCP 200 — Clinical Practice III 3
RCP 204 — Emergency and Special Procedures 3
RCP 210 — Cardiopulmonary Pathophysiology 3
RCP 212 — Neonatal/Pediatric Respiratory Care 3
RCP 214 — Advanced Diagnostic Procedures 3
RCP 225 — Clinical Practice IV 3
RCP 228 — Preventive and Long-Term Respiratory Care 2
RCP 250 — Clinical Practice V 3
RCP 299 — Selected Topics in Respiratory Care 1
Program Requirements Total 48

Supplemental Requirements
BIOL 217 — Elementary Medical Microbiology 4
BIOL 234 — Human Anatomy & Physiology I 3
BIOL 235 — Human Anatomy & Physiology II 3

Supplemental Requirements Total 10

Components of Degree Requirement
General Education 18
Program Requirements 48
Supplemental Requirements 10
Degree Requirement Total 76

Department of Imaging Sciences
Barbara L. Dehner, Chair
210 Center for Health, Education and Research (CHER)
606-783-2646

Faculty
J. Applegate, M. Cooper (Clinical Coordinator), J. Darling, B. Dehner (Chair), L. Donathan, J. Fannin (Clinical Coordinator), C. Gibbs (Computed Tomography/Magnetic Resonance Coordinator), W. Goodpaster (Diagnostic Medical Sonography Coordinator)

Morehead State University’s Department of Imaging Sciences offers an Associate of Applied Science degree in Radiologic Science (AAS) and a Bachelor of Science Degree in Imaging Sciences (BSIS) with areas of concentration in Computed Tomography/Magnetic Resonance, Diagnostic Medical Sonography and Leadership in Medical Imaging.

Associate of Applied Science in Radiologic Science
The Associate Degree Radiologic Science Program has a selective admission process based on completion of 30 credit hours of required pre-radiologic science courses with a minimum 2.5 grade point average and a minimum grade of “C” in each course.

Students must apply for admission by the fourth Friday in May of each year. Students are officially admitted into the program in the fall semester. The program consists of two years of radiologic science courses. The additional general education requirements for the baccalaureate degree may also be taken in conjunction with the courses of the associate degree.

Upon completion, the students will receive an Associate of Applied Science degree and may be eligible to apply for the American Registry of Radiologic Technologists (ARRT) National Certification Examination in radiography.

Program Goals and Outcomes
1. Students will be clinically competent.
2. Students will communicate effectively.
3. Students will use critical thinking skills.
4. Students will evaluate the importance of professionalism.

Student Learning Outcomes
1. Students apply positioning skills.
2. Students employ radiation protection practices.
3. Students use effective oral communication skills.
4. Students practice effective written communication skills.
5. Students manipulate technical factors to obtain optimal results for non-routine examinations.
6. Students sufficiently apply the principles of radiographic physics to solve a practical problem.
7. Students recognize the importance of continued professional development.
8. Students exhibit professional behaviors.

Assessment Procedures
Survey of graduates
Survey of employers
Monitoring of licensure examinations

Admission Criteria
A. Unconditional acceptance to Morehead State University through the Office of Enrollment Services. The office may be contacted at 606-783-2000.
B. Completion of the following 30 credit hours of required pre-radiologic science courses with a minimum grade of "C".
   - BIOL 234 — Human Anatomy & Physiology I 3
   - BIOL 235 — Human Anatomy & Physiology II 3
   - CIS 101 — Computers for Learning 3
   - COMM 108 — Fund. of Speech Communication 3
   - ENG 100 — Writing I 3
   - MATH 152 — College Algebra (Math 174 or MATH 175 also acceptable) 3
   - MATH 175 also acceptable)
   - *FYS 101 — First Year Seminar 3
   - IMS/NURS 202 — Medical Terminology 2
   - PSY 154 — Introduction to Psychology 3
   - **RSCI 110 — Intro. to Radiologic Sciences 1
   - **General education distribution or
   - ENG 200 3
   - Total 30

**Consideration may be granted for this course to be completed after admission during the first semester.
**Any distribution course fulfills the requirement for program admission.
*Transfer students with more than 24 credit hours are exempt from completing this course and must complete a Social and Behavioral Science course to meet general education requirements.
C. More than two failures of pre-radiologic science courses within two complete academic years will result in ineligibility for admission. This includes failure of more than two courses or failure of the same course more than twice. Students with course failure(s) prior to the two-year period (two complete academic years) will be considered for admission if the student has demonstrated satisfactory academic progress ("C" or above in required courses) since the course failure(s).
D. A grade point average of 2.5 or higher (with no rounding) in the required pre-radiologic science courses (FYS 100 is not calculated in the GPA) and a cumulative GPA of 2.0 on all college work.
E. Meet the established health and physical capability requirements as listed below.
   1. Vision capabilities:
      a. Normal or corrected refraction within the range of 20/20 to 20/60.
      b. Able to distinguish color shade changes.
   2. Auditory capabilities:
      a. Possess normal or corrected hearing ability within 0 to 45-decibel range.
   3. Tactile capabilities:
      a. Possess the ability to adapt to the environment, function in everyday activities, and cope with stressors.
      b. Recognize an object by touching and handling.
   4. Language capabilities:
      a. Possess the ability to verbally communicate.
   5. Minimal motor capabilities:
      a. Grasp securely with two functional upper limbs.
      b. Push and/or pull moveable objects weighing 100-150 lbs.
      c. Lift at least 25 lbs. without assistance.
      d. Stand for long periods of time.
      e. Walk without assistance of canes, crutches, walkers, and/or humans.
      f. Reach above shoulders and below waist.
      g. Twist, bend, stoop/squat, and move quickly.
   6. Mental health:
      a. Possess the ability to adapt to the environment, function in everyday activities, and cope with stressors.
   7. Freedom from transmittable disease as documented by:
      a. Negative PPD and/or chest x-ray within immediate past 12 months.
      b. Rubella and rubeola antibody test (titer values that indicate immunity) documentation of MMR (rubella and rubeola and mumps) vaccine.
      c. Hepatitis B Vaccine series.
      d. Varicella zoster live-virus vaccine or reliable history of varicella (chicken pox) or serologic evidence of immunity.
      e. Immunization as recommended by the Advisory Committee on Immunization Practices of the U.S. Public Health Service and the Committee on Infectious Disease of the American Academy of Pediatrics.
F. Possess current certification in Basic Life Support for Health Care Providers (CPR) by the American Heart Association.

Application Procedure
Applications will be accepted beginning in January and must be received by the fourth Friday in May.
   a. Submit a complete application packet with the following required materials:
      1. Imaging Sciences Admission Application.
      2. Official transcripts from MSU and/or other universities/colleges attended. Transcripts must include all colleges to be considered.
3. Copy of course description(s) if transfer credit is sought.
b. Mail complete application packet to:

Morehead State University
Department of Imaging Sciences
Associate of Applied Science in Radiologic Science
Academic Counseling Coordinator
CHER 210D
Morehead, KY 40351
Phone: 606-783-2646

Requirements for the Completion of an Associate of Applied Sciences Degree in Radiologic Science

1. Complete a minimum of 78 semester credit hours. These include prescribed and elective general education credits, support courses, and radiologic science courses.
2. Earn a minimum cumulative GPA of 2.0 on all work completed at the University.
3. Complete at least 16 semester hours at MSU, including one semester preceding graduation. Regional campus sites satisfy this requirement, however, correspondence courses do not.
4. Complete one semester of FYS 101 — First Year Seminar during the student’s first semester if the student begins as a freshman or transfers to MSU with less than 24 credit hours.

Fees and Expenses

Fees and expenses specific to the Department of Imaging Sciences Programs are in addition to those required by MSU. These are subject to change without prior notification. The students are responsible for the purchase of white uniforms, white hose (if applicable), white clinical shoes, white lab coat, malpractice insurance, laboratory fees, dosimeter related fees, film marker fees (if applicable), and all housing and transportation expenses incurred during clinical internship assignments. Students are also responsible for all fees for criminal background checks, drug-testing, certification examinations and all applicable course fees.

Additional Information

- Students may be assigned to clinical practicum areas requiring distant travel or relocation.
- Clinical experience and formal class sessions may be required during various hours of the day, evening, and night.

Associate Degree in Radiologic Science

General Education Requirements

MATH 152 — College Algebra (Math 174 or MATH 175 also acceptable) 3

General Education Total 15

Refer to the General Education section for a complete listing of general education requirements for the University.

Program Requirements

*RSCI 110 — Introduction to Radiologic Sciences 1
RSCI 200 — Patient Care 3
RSCI 206 — Radiographic Anatomy, Positioning, and Imaging Production I 5
RSCI 210 — Radiographic Equipment and Imaging I 3
RSCI 230 — Radiography Clinical Internship I 10
RSCI 300 — Film Critique and Evaluation 2
RSCI 310 — Radiographic Anatomy, Positioning, and Imaging Production II 4
RSCI 320 — Radiography Clinical Internship II 10
RSCI 330 — Imaging Pathology 2
RSCI 335 — Radiation Biology and Protection 2
RSCI 340 — Radiographic Equipment and Imaging II 3
RSCI 346 — Radiation Physics and Electronics 2
RSCI 350 — Seminar in Radiography 2

Program Requirements Total 49

*Consideration may be granted for this course to be completed after admission during the first semester.

Supplemental Requirements

BIOL 234 — Human Anatomy and Physiology I 3
BIOL 235 — Human Anatomy and Physiology II 3
CIS 101 — Computers for Learning 3
IMS/NURS 202 — Medical Terminology 2
PSY 154 — Introduction to Psychology 3

Supplemental Requirements Total 14

Components of Degree Requirement

General Education 15
Program Requirements 49
Supplemental Requirements 14
Degree Requirements Total 78

Bachelor of Science Degree in Imaging Sciences

The Baccalaureate Degree Imaging Sciences Program is a four-year program of study with areas of concentration in Computed Tomography/Magnetic Resonance (CT/MR) and Diagnostic Medical Sonography (DMS). The programs have a selective admission policy, which is separate and in addition to the University’s admission procedure. The number of available clinical positions limits enrollment in the program. Candidates for the programs will be ranked according to grade point average in the general education courses, support courses, and radiography courses.

Students must apply for admission by the first Monday in April. Students are officially admitted into the programs in the following Summer II term. The program consists of 13 months of either Computed Tomography/Magnetic Resonance or Diagnostic Medical Sonography courses.

Upon completion of the CT/MR Program and the American Registry of Radiologic Technologists (ARRT) clinical requirements, the graduate may be eligible to sit for the ARRT National Certification Examination in Computed Tomography and Magnetic Resonance. Upon completion of the Diagnostic Medical Sonography Program, the graduate may be eligible to sit for the American Registry of Diagnostic Medical Sonography (ARDMS) National Certification Examinations.

Admission Criteria

A. Unconditional acceptance to Morehead State University through the Office of Enrollment Services. The office may be contacted at 606-783-2000.
B. Completion of the following courses with a minimum grade of "C" (some courses can be transferred from other institutions):
   - BIOL 234 — Human Anatomy & Physiology I 3
   - BIOL 235 — Human Anatomy & Physiology II 3
   - CIS 101 — Computers for Learning 3
   - COMM 108 — Fundamentals of Speech 3
   - Communication
   - ENG 100 — Writing I 3
   - ENG 200 — Writing II 3
   - MATH 152 — College Algebra 3
   - IMS/NURS 202 — Medical Terminology 2
   - HUM I & HUM II - Humanities Distribution Requirement 6
   - NSC I & NSC II - Natural Sciences Distribution Requirement 6
   - SBS I & SBS II - Social & Behavioral Distribution Requirement 6
   - *FYS 101 — First Year Seminar 3

   Total General Education & Support Courses 41

   *Transfer students with more than 24 credit hours are exempt from this course and must complete a Social and Behavioral Science course to meet general education requirements. FYS 101 or additional Social and Behavioral Sciences course is not calculated in admission GPA.

C. More than two failures of pre-radiologic science courses within two complete academic years will result in ineligibility for admission. This includes failure of more than two courses or failure of the same course more than twice. Students with course failure(s) prior to the two-year period (two complete academic years) will be considered for admission if the student has demonstrated satisfactory academic progress ("C" or above in required courses) since the course failures.

D. A GPA of 2.5 or higher for all required college work.

E. Graduate of the Associate Degree Radiologic Science Program at MSU or other radiography program accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). Considerations for non-JRCERT program graduates will be considered on an individual or program basis. Graduates of an approved program may receive an equivalent credit block to satisfy the radiography component.

F. Registered and in good standing with the American Registry of Radiologic Technologists in Radiography. Applicants who are not registered must obtain certification prior to the beginning of the fall semester.

G. Meet the established health and physical capability requirements as listed below.
   1. Vision capabilities:
      a. Normal or corrected refraction within the range of 20/20 to 20/60.
      b. Able to distinguish color shade changes.
   2. Auditory capabilities: possess normal or corrected hearing ability within 0 to 45-decibel range.
   3. Tactile capabilities:
      a. Possess in at least one hand the ability to perceive temperature change and pulsation and to differentiate between various textures and structures.
      b. Recognize an object by touching and handling.
   4. Language capabilities: possess the ability to verbally communicate.
   5. Minimal motor capabilities:
      a. Grasp securely with two functional upper limbs.
      b. Push and/or pull moveable objects weighing 100-150 lbs.
      c. Lift at least 25 lbs. without assistance.
      d. Stand for long periods of time.
      e. Walk without assistance of canes, crutches, walkers, and/or humans.
      f. Reach above shoulders and below waist.
      g. Twist, bend, stoop/squat, and move quickly.
   6. Mental health: possess the ability to adapt to the environment, function in everyday activities, and cope with stressors.
   7. Freedom from transmittable disease as documented by:
      a. Negative PPD and/or chest x-ray within immediate past 12 months.
      b. Rubella and rubeola antibody test (titer values that indicate immunity) documentation of MMR (rubella and rubeola and mumps) vaccine.
      c. Hepatitis B Vaccine series.
      d. Varicella zoster live-virus vaccine or reliable history of varicella (chicken pox) or serologic evidence of immunity.
      e. Immunization as recommended by the Advisory Committee on Immunization Practices of the U.S. Public Health Service and the Committee on Infectious Disease of the American Academy of Pediatrics.

   Note: The Magnetic Resonance system has a very strong magnetic field that may be hazardous to individuals entering the MR environment if they have certain metallic, electronic, magnetic, or mechanical implants, devices, or objects. To perform/assist with MRI procedures on patients, students must initially undergo the same screening procedures as patients in order to enter the scan room. Objects that display any form of ferromagnetism are therefore of particular concern for MRI.

   If any of the above are applicable, contact the Academic Counseling Coordinator at 606-783-2646 for further information regarding screening.

   This notice has been adopted and modified from Frank G. Shellock website, www.MRI Safety.com.

H. Possess current certification in Basic Life Support for Health Care Providers (CPR) by the American Heart Association.

Application Procedure

Applications will be accepted beginning in January and must be received by the first Monday in April.

a. Submit a complete application packet with the following required materials:
   1. Imaging Sciences Admission Application, Bachelor of Science Degree in Imaging Sciences designating the Computed Tomography Magnetic Resonance Program or Diagnostic Medical Sonography Program.
   2. Official transcript(s) documenting all courses required for admission. Students currently enrolled are required to
submit spring midterm grades for consideration. Students attending institutions that do not provide midterm grades must submit a letter from the radiography program coordinator or individual faculty in general education courses stating the student’s letter grade at the current time for each course. All letters must be submitted on official institutional letterhead. Students must complete required courses with a “C” or better and maintain a grade point average of 2.5 or higher.

3. Copy of course description(s) if transfer credit is sought.

4. Copy of the current American Registry of Radiologic Technologists registration card for radiography. Applicants who are not registered must obtain certification prior to the beginning of the fall semester.

5. Copy of the current American Registry of Radiologic Technologists (Computed Tomography and/or Magnetic Resonance) registration card (if applicable).

6. Copy of the current American Registry of Diagnostic Medical Sonographers (ARDMS) registration card (if applicable). Note: If applying to both programs, you must rank your choice. Select which program is your first and second preference. Entrance will not be granted to both programs. Failure to rank your choices (if applying to both programs) will make your application invalid.

b. Mail complete application packet to:

Morehead State University
Department of Imaging Sciences
Bachelor of Science in Imaging Sciences
Academic Counseling Coordinator
CHER 210D
Morehead, KY 40351
Phone: 606-783-2646

Requirements for Completion of a Bachelor of Science Degree in Imaging Sciences

a. Complete a minimum of 135-136 credit hours, of which, a minimum of 42 credit hours must be upper division courses (numbered 300 or above). The total credit hours include general education, support, radiography, and computed tomography/magnetic resonance or diagnostic medical sonography courses.

b. Earn a minimum cumulative GPA of 2.0 on all work completed at the University.

c. Minimum grade of “C” required for all courses in the program.

d. Complete at least 32 credit hours at MSU with the last 16 hours preceding graduation earned at MSU. Regional campus sites satisfy this requirement; however, correspondence courses do not.

Fees and Expenses

Fees and expenses specific to the Department of Imaging Sciences Programs are in addition to those required by MSU. These are subject to change without prior notification. The students are responsible for the purchase of white uniforms, white hose (if applicable), white clinical shoes, white lab coat, malpractice insurance, laboratory fees, dosimeter related fees, film marker fees (if applicable), and all housing and transportation expenses incurred during clinical internship assignments. Students are also responsible for all fees for criminal background checks, drug-testing, certification examinations and all applicable course fees.

Additional Information

- Students may be assigned to clinical practicum areas requiring distant travel or relocation.
- Clinical experience and formal class sessions may be required during various hours of the day, evening, and night.

Computed Tomography/Magnetic Resonance Program

Computed Tomography Goals and Student Learner Outcomes

1. Students will be clinically competent.
   Student learner outcomes:
   - Students select appropriate scan parameters to provide optimal image quality.
   - Students employ proper radiation and safety practices in the clinical setting.

2. Students will employ critical thinking skills.
   Student learner outcomes:
   - Students adapt imaging parameters for pathological considerations.
   - Students employ critical thinking skills in providing patient care while anticipating patient needs throughout a computed tomography procedure.

3. Students will model professionalism.
   Student learner outcomes:
   - Students analyze the importance of professionalism in the practice of imaging.
   - Students participate in a professional imaging activity.

4. Students will employ effective communication skills in healthcare environment.
   Student learner outcomes:
   - Students demonstrate appropriate communication skills.
   - Students utilize appropriate communication skills in educating the patient on general aspects of computed tomography and procedure specifics.

Magnetic Resonance Goals and Student Learner Outcomes

1. Students will be clinically competent.
   Student learner outcomes:
   - Students select appropriate scan parameters to provide optimal image quality.
   - Students employ proper safety practices in the clinical setting.

2. Students will employ critical thinking skills.
   Student learner outcomes:
• Students adapt imaging parameters for pathological considerations.
• Students apply scientific inquiry in the application of magnetic resonance.

3. Students will model professionalism.

Student learner outcomes:
• Students analyze the importance of professionalism in the practice of imaging.
• Students participate at a professional imaging activity.

4. Students will employ effective communication skills in the healthcare environment.

Student learner outcomes:
• Students demonstrate appropriate communication skills.
• Students utilize appropriate communication skills in educating the patient on general aspects of magnetic resonance and procedure specifics.

Assessment Procedures
Survey of graduates
Survey of employers
Monitoring of certification examinations

General Education Requirements
MATH 152 — College Algebra 3
Also acceptable: MATH 174 or MATH 175
CTMR 499C — Seminar in Magnetic Resonance 3

General Education Total 36

Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Program Requirements
CTMR 403 — Computed Tomographic Physics and Instrumentation 3
CTMR 405 — Computed Tomography/Magnetic Resonance Sectional Anatomy 4
CTMR 413 — Advanced Patient Care 2
CTMR 443 — Imaging Procedures in Computed Tomography 4
CTMR 451 — Magnetic Resonance Physical Principles of Image Formation 4
CTMR 455 — Imaging Procedures in Magnetic Resonance 3
CTMR 461 — Magnetic Resonance Practicum I 5
CTMR 467 — Computed Tomography Practicum I 5
CTMR 477 — Advanced Imaging Practicum I 4
CTMR 483 — Seminar in Computed Tomography 2
CTMR 485 — Advanced Imaging Practicum II 4
*CTMR 499C — Seminar in Magnetic Resonance 3

Program Requirements Total 40

*Course hours included only in general education total.

Supplemental Requirements
BIOL 234 — Human Anatomy and Physiology I 3
BIOL 235 — Human Anatomy and Physiology II 3
CIS 101 — Computers for Learning 2

IMS/NURS 202 — Medical Terminology 2
One of the following:
RSCI 375 — Radiography Component for Transfers 37
or
RSCI 110 — Introduction to Radiologic Sciences 1
RSCI 200 — Patient Care 3
RSCI 206 — Radiographic Anatomy, Positioning, and Imaging Production I 5
RSCI 210 — Radiographic Equipment and Imaging I 3
RSCI 230 — Radiography Clinical Internship I 10
RSCI 300 — Film Critique and Evaluation 2
RSCI 310 — Radiographic Anatomy, Positioning, and Imaging Production II 4
RSCI 320 — Radiography Clinical Internship II 10
RSCI 330 — Imaging Pathology 2
RSCI 335 — Radiation Biology and Protection 2
RSCI 340 — Radiographic Equipment and Imaging II 3
RSCI 346 — Radiation Physics and Electronics 2
RSCI 350 — Seminar in Radiography 2

Program Requirements Total 60

*For transfer students, refer to Admission Criteria item E of the Bachelor of Imaging Science section. The number of hours of the Radiography component may vary depending on the specific radiography program the student completed. If less than 37 hours are available for transfer, additional specific courses will be required at MSU to meet the 120 hour baccalaureate degree requirement.

Components of Degree Requirements
General Education 36
Program Requirements 40
Supplemental Requirements 60

Degree Requirements Total 136

Upon permission, experienced computed tomography/magnetic resonance practitioners may elect to take "CLEP" tests for credit in subjects they have mastered. Refer to the University and department "CLEP" policies for additional information.

Diagnostic Medical Sonography Program

Student Outcomes
The student will:

a. Synthesize principles from mathematics, natural sciences, social and behavioral sciences, and humanities to serve as a foundation for sonographic practice
b. Integrate scientific knowledge and technical skills with effective communication methods to provide quality care and useful diagnostic information
c. Employ critical thinking by practicing as an entry-level sonographer
d. Demonstrate professional and ethical behavior as a diagnostic medical sonographer

Assessment Procedures
Survey of graduates
Survey of employers
Monitoring of certification examinations
General Education Requirements

- MATH 152 — College Algebra 3
- Also acceptable: MATH 174 or MATH 175
- DMS 499C — Senior Seminar in Sonography 3

General Education Total 36

Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Program Requirements

- DMS 400 — Introduction to Sonography 1
- DMS 402A — Scanning Techniques I 1
- DMS 408 — Sonographic Sectional Anatomy 2
- DMS 410 — Abdominal Sonography 2
- DMS 412 — Scanning Techniques II 1
- DMS 416A — Scanning Techniques III 1
- DMS 418 — Genitourinary Sonography 2
- DMS 420 — Sonographic Physics and Instrumentation I 2
- DMS 426A — Scanning Techniques IV 1
- DMS 428 — Obstetrical Sonography 2
- DMS 430 — Sonography Internship I 6
- DMS 438 — Selected Topics in Sonography 2
- DMS 441 — Sonographic Physics and Instrumentation II 2
- DMS 442A — Scanning Techniques V 1
- DMS 450 — Sonographic Internship II 6
- DMS 470 — Sonographic Internship III 4
- DMS 490 — Sonographic Internship IV 3
- *DMS 499C — Senior Seminar in Sonography 3

Program Requirements Total 39

*Course hours included only in general education.

Supplemental Requirements

- BIOL 234 — Human Anatomy and Physiology I 3
- BIOL 235 — Human Anatomy and Physiology II 3
- CIS 101 — Computers for Learning 3
- IMS/NURS 202 — Medical Terminology 2

One of the following:

- RSCI 375 — Radiography Component for Transfers 37
- or
- RSCI 110 — Introduction to Radiologic Sciences 1
- RSCI 200 — Patient Care 3
- RSCI 206 — Radiographic Anatomy, Positioning, and Imaging Production I 5
- RSCI 210 — Radiographic Equipment and Imaging I 3
- RSCI 230 — Radiography Clinical Internship I 10
- RSCI 300 — Film Critique and Evaluation 2
- RSCI 310 — Radiographic Anatomy, Positioning, and Imaging Production II 4
- RSCI 320 — Radiography Clinical Internship II 10
- RSCI 330 — Imaging Pathology 2
- RSCI 335 — Radiation Biology and Protection 2
- RSCI 340 — Radiographic Equipment and Imaging II 3
- RSCI 346 — Radiation Physics and Electronics 2
- RSCI 350 — Seminar in Radiography 2

Program Requirements Total 60

*For transfer students, refer to Admission Criteria item E of the Bachelor of Imaging Science section.

Components of Degree Requirements

- General Education 36
- Program Requirements 39
- Supplemental Requirements 60

Degree Requirements Total 135

Upon permission, experienced sonographers may elect to take "CLEP" tests for credit in subjects they have mastered. Refer to the University and department "CLEP" policies for additional information.

Bachelor of Science Degree in Imaging Sciences

Area of concentration: Leadership in Medical Imaging

The Bachelor of Imaging Sciences — Leadership in Medical Imaging degree is an online degree available to registered practitioners in radiography, nuclear medicine, sonography, or radiation therapy.

This program allows the student to complete the required courses part time and is planned for the working practitioner who wants to pursue a leadership role in imaging sciences. Following admission, the student should contact his/her assigned advisor for academic counseling.

Admission Criteria

a. Unconditional acceptance to Morehead State University through the Office of Enrollment Services.

b. Graduate of the Associate Degree Radiologic Science Program at MSU or other radiography program accredited by the Joint Review Committee on Education in Radiologic Technology. Considerations for non-JRCERT program graduates will be considered on an individual or program basis. Graduates of an approved program may receive an equivalent credit block to satisfy the radiography component.

c. Completion of the following 15 credit hours of prerequisite courses:

- CIS 101 — Computers for Learning
- COMM 108 — Fundamentals of Speech Communication
- ENG 100 — Writing I
- ENG 200 — Writing II
- MATH 131 (or higher) — Mathematical Reasoning & Problem Solving

d. Have a cumulative grade point average of 2.5 on all coursework for admission to the degree program.

e. Registered and in good standing by respective certification agency, for example American Registry of Radiologic Technologists (ARRT), American Registry of Diagnostic Medical Sonography (ARDMS), or Nuclear Medicine Technology Certification Board (NMTCB).
Application Procedure

Applicants will be accepted beginning in January for the fall semester and must be received by the 4th Monday in March. Applications will be accepted beginning in August for the spring semester and must be received by the 4th Monday in October. Late applications may be considered until the class is filled.

Submit a complete application packet with the following required materials:

1. Department of Imaging Sciences BSIS Admission Application designating the Leadership in Medical Imaging online program.
2. Official transcripts documenting all courses required for admission.
3. Copy of course description(s) if course equivalencies are not listed on the transfer credit webpage located at http://www.moreheadstate.edu/registrar/index.aspx?id=3942.
4. Copy of current certification card. For example, American Registry of Radiologic Technologists (ARRT), American Registry of Diagnostic Medical Sonography (ARDMS), or Nuclear Medicine Technology Certification Board (NMTCB).

Goals and Student Outcomes

Goals
1. Integrate methods of leadership, management, teaching/learning, and health care regulations into the professional practice.
2. Employ critical thinking and communication skills in the professional practice of imaging sciences.

Student Learner Outcomes
1. Students synthesize leadership methods.
2. Students analyze management methods.
4. Students synthesize healthcare regulation methods.
5. Students demonstrate effective critical thinking skills.
6. Students demonstrate effective communication skills.

General Education Requirements
MATH 131 — Mathematical Reasoning and Problem Solving
Also acceptable: MATH 135, MATH 141, MATH 152, MATH 174, or MATH 175
IMS 499C — Senior Seminar in Radiologic Sciences

General Education Total 36

Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Program Requirements
IMS 321 — Intro to Multidisciplinary Health Sciences
IMS 331 — Issues and Trends in Healthcare Delivery Systems
IMS 341 — Sectional Anatomy for the Medical Imaging Professional
IMS 351 — Picture Archiving & Comm. Systems
IMS 361 — Leadership for the Healthcare Professional
IMS 401 — Health Care Law and Policy
IMS 421 — Prog. Planning, Evaluation & Assessment
IMS 431 — Operations Management in Healthcare
IMS 471 — Teach. Methodologies in Imaging Sciences
IMS 481 — Fiscal Management in Healthcare
IMS 491 — Curriculum Dev. in Imaging Sciences

Program Requirements Total 33

Supplemental Requirements
CIS 101 — Computers for Learning
One of the following:
*RSCI 375 — Imaging Discipline for Transfers 32-48
or
RSCI 110 — Introduction to Radiologic Sciences 1
RSCI 200 — Patient Care 3
RSCI 206 — Radiographic Anatomy, Positioning, and Imaging Production I 5
RSCI 210 — Radiographic Equipment and Imaging I 3
RSCI 230 — Radiography Clinical Internship I 10
RSCI 300 — Film Critique and Evaluation 2
RSCI 310 — Radiographic Anatomy, Positioning, and Imaging Production II 4
RSCI 320 — Radiography Clinical Internship II 10
RSCI 330 — Imaging Pathology 2
RSCI 335 — Radiation Biology and Protection 2
RSCI 340 — Radiographic Equipment and Imaging II 3
RSCI 346 — Radiation Physics and Electronics 2
RSCI 350 — Seminar in Radiography 2

Program Requirements Total 52

For transfer students, refer to Admission Criteria item B.

Components of Degree Requirements
General Education 36
Program Requirements 33
Supplemental Requirements 52
Degree Requirements Total 121

Imaging Discipline
*Listed below are block transfers available for the respective discipline area of courses completed during the first two years of a professional curriculum.

RSCI 375 — Radiography Transfer
IMS 376 — Nuclear Medicine Transfer
IMS 378 — Sonography Transfer
IMS 379 — Radiation Therapy Transfer

Students must complete 42 semester hours which must be courses numbered 300 or above. Refer to the bachelor’s degree requirements for additional information.

*If transfer courses do not equate to the required hours, the students must complete the needed hours from the approved courses listed below to meet the degree requirements of 120.

COMM 390 — Conflict and Communication 3
IMS 300 — Ethical & Legal Issues in Healthcare 3
IMS 302 — Hlth Mainten. Throughout the Life Span 3
Associate of Applied Science

The ADNP is a program of study leading to an Associate of Applied Science (AAS) degree with an area of concentration in nursing. The program combines general education studies with nursing theory and clinical education. The program is designed to prepare graduates for the role of the registered nurse. Graduates of the program are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The ADNP is accredited by the National League for Nursing Accrediting Commission Inc., 3343 Peachtree Rd. NE, Suite 500, Atlanta, GA 30326 404-975-5000.

Admission Requirements and Procedures

The ADNP has selective admission and enrollment is limited. In the event there are more qualified applicants than positions, students with the highest ACT scores will be accepted. The ADNP offers programs at the Morehead and Mt. Sterling campus.

Application Procedure

1. Be unconditionally admitted to MSU.
2. Submit a completed application packet to the ADNP. Completed admission packets include:
   a. Completed ADNP application.
   b. Official American College Test (ACT) scores.
   c. Transcript from MSU and official transcripts from all universities/colleges attended if courses taken at other institutions are not listed on the MSU transcript.
   d. University undergraduate catalog(s) if transfer credit is sought.
   e. Midterm grades for prerequisite and support courses.
3. Submit the following as applicable:
   a. Paramedic-ADNP applicant: in addition to the above materials, must successfully complete a National Standard Curriculum Paramedic Course, submit verification of an active paramedic state certification with no restrictions, and have the equivalent of one year's experience as a paramedic.
   b. Nursing transfer student: in addition to the above materials, must submit:
      I. University undergraduate catalog(s) if transfer credit is sought;
      II. Syllabi for nursing course(s) to be evaluated for transfer credit; and
      III. Letter of recommendation from the director/coordinator of the nursing program from which the student is transferring.
4. Student selection process occurs following the posting of midterm grades of the semester preceding admission.
5. Applicants reapplying to the ADNP must submit new application materials to be considered for admission.
6. Students may be officially admitted to the ADNP in the fall or spring semester.
7. Students submitting complete application packets by the following deadlines will receive first consideration for official admission.

Fall Admission: Last Friday in March
Spring Admission: Last Friday in October

Department of Nursing

Kimberly Clevenger, Interim Chair
Center for Health, Education and Research (CHER) Suite 201
BNP 606-783-2296
ADNP 606-783-2438

Faculty
A. Brown, N. Bush, C. Bledsoe, T. Clark, K. Clevenger (Interim Chair), T. Ferguson, T. Howell, S. Johnson, L. Kiper, L. Mays (ADNP Coordinator, Morehead), M. McClave, C. Rogers, D. Rose, V. Sammons, K. Silvey, M. Walters (ADNP Coordinator, Mt. Sterling), S. White

Associate Degree Nursing Program

Center for Health, Education and Research (CHER) Suite 201 606-783-2438

Program Competencies

The Associate Degree Nursing Program graduate will:

1. Compare and contrast the major roles of the Associate Degree Nurse as provider of care, manager of care and member within the discipline of nursing into the care of individuals with complex and critical illnesses to promote human flourishing.
2. Critique communication skills used in therapeutic and collaborative roles.
3. Evaluate the effectiveness of the use of the nursing process and clinical reasoning within a multicultural society in a holistic manner.
4. Develop competency in the performance of caring behaviors to meet client care needs using a patient centered approach.
5. Develop effective management skills of client care through prioritization, collaboration, coordination, delegation, and effective utilization of resources in dynamic health care systems while maintaining a spirit of inquiry.
6. Analyze legal, ethical and value-based issues embedded in nursing care.
7. Evaluate the influences of nutrition and pharmacology in the care of individuals with diverse backgrounds across the lifespan.
8. Critique the use of current technologies and clinical informatics in the provision and management of nursing care.

Assessment Procedures

Course content and program outcomes are assessed by formative and summative standardized testing, and graduate performance on the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Students complete standardized testing at the completion of each course within the curriculum to evaluate course specific outcomes. Students complete standardized testing during the last week of the program to assess program outcomes. Following graduation each student must complete the NCLEX-RN to gain licensure as a registered nurse.
Late applicants will only be considered after all applicants meeting the published deadlines have been reviewed. Submit applications to:

**Academic Counseling Coordinator**  
Associate Degree Nursing Program,  
Center for Health, Education and Research (CHER) Suite 201  
Department of Nursing  
Morehead State University  
Morehead, KY 40351

**Admission Criteria**

The ADN Program has a limited enrollment on the Morehead and Mt. Sterling campuses. The following criteria are used to determine conditional acceptance to the ADN Program for ADNP applicants and Paramedic-ADNP applicants:

1. American College Test (Enhanced ACT) Score with a mandatory minimum composite score of 19 or higher.
2. Applicants must meet the following:
   a. A minimum GPA of 2.5 or higher on a scale of 4.0 with a minimum grade of "C" in prerequisite courses required for the Associate Degree Nursing Program.
   b. Maintain a minimum grade of "C" in all courses required for the ADN. Applicants with a grade of less than "C" on two courses required for the ADN within the last two years are not eligible for admission.
   c. A minimum cumulative GPA of 2.0 on all work at Morehead State University.
   d. May be conditionally admitted to the program pending successful completion of prerequisite courses required for admission to the program.
3. Final acceptance will be dependent on maintaining course grades and grade point average as well as meeting CPR and Health requirements by established dates. Compliance with the Technical Performance Standards is also required.
4. Clinical education is a mandatory component of the ADN. Because of accreditation requirements of the clinical education centers, students will be required to obtain a criminal background check and/or undergo drug testing prior to acceptance to the clinical assignment. The student is responsible for any incurred cost. Any student who fails acceptance to the clinical assignment will be unable to complete the program.

**Prerequisite courses required prior to admission.**

**Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 234 — Human Anatomy &amp; Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 235 — Human Anatomy &amp; Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 100 — Writing I</td>
<td>3</td>
</tr>
<tr>
<td>Math Core (MATH 135 is recommended)</td>
<td>3</td>
</tr>
</tbody>
</table>

**NOTE:** Admission criteria and procedures are reviewed on an annual basis. It is the applicant’s responsibility to verify current application criteria and procedures prior to the application deadline.

**Paramedic to ADNP**

**Admission Criteria**

The Associate Degree Nursing (ADN) Program has limited enrollment on the Morehead and Mt. Sterling campuses. The following criteria are used to determine conditional acceptance to the ADN Program for ADNP applicants and Paramedic-ADNP applicants:

1. American College Test (Enhanced ACT) Score with a mandatory minimum composite score of 19 or higher.
2. Applicants must have the following:
   a. Applicants must have a GPA of 2.5 or higher on a scale of 4.0 with a minimum grade of "C" in prerequisite courses required for the Associate Degree Nursing Program.
   b. Applicants must maintain a minimum grade of "C" in all courses required for the ADN. Applicants with a grade less than "C" on two courses required for the ADN within the last two years are not eligible for admission.
   c. Applicants must have a minimum cumulative GPA of 2.0 on all work at the University.
   d. Applicants may be conditionally admitted to the program pending successful completion of prerequisite courses required for admission to the program.
   e. Paramedic-ADNP applicants must (1) successfully complete a National Standard Curriculum Paramedic Course, (2) hold an active paramedic state certification with no restrictions, and (3) have the equivalent of one year’s experience as a paramedic.
   f. Paramedic-ADNP applicants must successfully complete (with a minimum grade of "C") all other prerequisite courses prior to completion of the Paramedic-ADNP Transition course, NURA 111.
   g. Paramedic-ADNP applicants must seek admission into the ADN within one year after completion of NURA 111, Paramedic-ADNP Transition, with a grade of "C" of higher.
3. Final acceptance will be dependent on maintaining course grades and grade point average as well as meeting CPR and Health requirements by established dates. Compliance with the Technical Performance Standards is also required.
4. Clinical education is a mandatory component of the ADN. Due to accreditation requirements of the clinical education centers, students will be required to obtain a criminal background check and/or undergo drug testing prior to acceptance to the clinical assignment. The student is responsible for any incurred cost. Any student who fails acceptance to the clinical assignment will be unable to complete the program.

**Prerequisite courses required prior to registering for NURA 111: Paramedic-ADN Transition**

**Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 234 — Human Anatomy &amp; Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 235 — Human Anatomy &amp; Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>FYS 101 — First Year Seminar</td>
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</tr>
<tr>
<td>ENG 100 — Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 200 — Writing II</td>
<td>3</td>
</tr>
<tr>
<td>Math Core (MATH 135 is recommended)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 154 — Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Prerequisite or Corequisite courses to be taken before or concurrently with NURA111: Paramedic-ADN Transition**
Courses
BIOL 217 & 217L — Elem. Medical Microbiology 4

Notes:
All ADNP students must document continued compliance with required immunizations and Technical Performance Standards for the Department of Nursing.

Admission procedures are reviewed on an annual basis. It is the applicant’s responsibility to verify current application criteria and procedures prior to the application deadline. ADNP Application forms are available in the Department of Nursing, CHER 201. Application forms are also available on the Web at www.moreheadstate.edu/nursing.

Conditions for Enrollment
1. Students may be assigned to clinical practice areas other than those in the immediate area, requiring traveling some distance from campus. Transportation to and from these settings is the responsibility of the student.
2. Clinical experiences and formal lectures may be required during various hours of the day, evening and night.
3. Students have the responsibility for the costs incurred by enrollment in the nursing program. These costs includes CPR, immunizations, professional malpractice insurance, criminal background check, academic materials, testing fees, clothing and equipment.

Associate Degree Nursing Program

General Education
*General Education Total 15
*MATH 135 is recommended for the MATH Core requirement.
Refer to the General Education section for a complete listing of general education requirements.

Program Requirements
NURA 103 — Nursing I 6
NURA 107 — Nursing II 8
NURA 201 — Nursing III 8
NURA 208 — Transition to Practice 2
NURA 209 — Nursing IV 10
Program Requirements Total 34

Supplemental Requirements
BIOL 217/BIOL 217L — Elementary Medical Biology 4
BIOL 234 — Human Anatomy and Physiology I 3
BIOL 235 — Human Anatomy and Physiology II 3
Humanities Elective 3
PSY 154 — Introduction to Psychology 3
Supplemental Requirements Total 16

Components of Degree Requirement
General Education Requirements 15
Program Requirements 34
Supplemental Requirements 16
Degree Requirements Total 65

Required Course Sequence for ADNP Students
A total of 65 credit hours is required for the AAS degree which includes 31 credit hours of general education and support courses and 34 credit hours of nursing courses. The student will be required to complete the course sequence approved by the University and in place at the time of admission to the ADN Program. ADN Program policies on challenge examination, transfer credit, academic standards and progression, and criteria for taking the National Council Licensure Examination can be obtained from the Department of Nursing.

Prior to Fall semester
BIOL 234 — Human Anatomy & Physiology I 3
BIOL 235 — Human Anatomy & Physiology II 3
ENG 100 — Writing I 3
MATH 135 — Mathematics for Technical Students (131, 152, 174, 175 or equivalent) 3
Total 12

First Semester
NURA 103 — Nursing I 6
COMM 108 — Fundamentals of Speech Communication 3
FYS 101 — First Year Seminar 3
PSY 154 — Introduction to Psychology 3
Total 15

Second Semester
NURA 107 — Nursing II 8
BIOL 217/BIOL 217L 4
Total 12

Third Semester
NURA 201 — Nursing III 8
ENG 200 — Writing II 3
Humanities Elective 3
Total 14

Fourth Semester
NURA 208 — Transition to Practice 2
NURA 209 — Nursing IV 10
Total 12

Total Program Credits 65

Paramedic to Associate Degree Nursing Program Track

General Education
*General Education Total 15
*MATH 135 is recommended for the MATH Core requirement.
Refer to the General Education section for a complete listing of general education requirements.

Program Requirements
NURA 111 — Paramedic/ADN Transition Course 6
NURA 201 — Nursing III 8
NURA 208 — Transition to Practice 2
NURA 209 — Nursing IV 10
14 hours “K” credit with successful completion of 14K
NURA 111 and admission to the ADNP
Program Requirements Total 40
### Supplemental Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
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<td>BIOL 217/BIOL 217L</td>
<td>Elementary Medical Biology</td>
<td>4</td>
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<tr>
<td>BIOL 234</td>
<td>Human Anatomy and Physiology I</td>
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<td>BIOL 235</td>
<td>Human Anatomy and Physiology II</td>
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<td>Humanities Elective</td>
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<tr>
<td>PSY 154</td>
<td>Introduction to Psychology</td>
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**Supplemental Requirements Total**: 16

### Components of Degree Requirement

<table>
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<th>Credits</th>
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<td>Program Requirements</td>
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<td>Supplemental Requirements</td>
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**Degree Requirement Total**: 71

### Required Curriculum Sequence for Paramedic to ADN Students

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<td>BIOL 217/BIOL 217L</td>
<td>Elementary Microbiology</td>
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<td>BIOL 234</td>
<td>Human Anatomy &amp; Physiology I</td>
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<td>BIOL 235</td>
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<tr>
<td>ENG 200</td>
<td>Writing II</td>
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<tr>
<td>FYS 101</td>
<td>First Year Seminar</td>
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<tr>
<td>MATH Core (MATH 135 is recommended)</td>
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<td>NURA 111</td>
<td>Paramedic/ADN Transition Course</td>
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<td>PSY 154</td>
<td>Introduction to Psychology</td>
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**Total**: 31

#### First Semester

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<td>NURA 201</td>
<td>Nursing III</td>
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<td>COMM 108</td>
<td>Fundamentals of Speech Comm</td>
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<td>Humanities Elective</td>
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**Semester Total**: 14

#### Second Semester

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<td>NURA 208</td>
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<tr>
<td>NURA 209</td>
<td>Nursing IV</td>
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**Semester Total**: 12

**Total Program Credits**: 57

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*After official admission to the ADNP, Paramedic to ADN students receive "K" credit for the following nursing courses.*

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<th>Course Code</th>
<th>Course Title</th>
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<td>NURA 103</td>
<td>Nursing I</td>
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<tr>
<td>NURA 107</td>
<td>Nursing II</td>
<td>8</td>
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</table>

**Total**: 14

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### Bachelor of Science in Nursing

#### Program Competencies

**Upon completion of the Baccalaureate Nursing Program (BNP), the graduate will be able to demonstrate the role of the professional nurse by:**

1. Demonstrating the application of critical thinking skills through the nursing process in the planning and provision of nursing care.
2. Communicating effectively in a variety of spoken, written, and technological formats.
3. Demonstrating competence, initiative, and commitment to the nursing profession.
4. Integrating current scientific knowledge, nursing theory and nursing research to deliver quality health care in accordance with the ANA Standards of Care and Code of Ethics for Nurses.
5. Assuming leadership roles within interdisciplinary health care teams and the profession of nursing.
6. Providing compassionate, sensitive, spiritual and culturally appropriate nursing care for patients at any stage of the life span.
7. Analyzing global issues in the context of cultural diversity.
8. Creating a health care environment that is conducive to wellness and health promotion.

#### Assessment Procedures

- Standardized examinations in specific nursing areas
- National Council Licensure Examination for Registered Nurses upon graduation
- BNP surveys of graduates and employers

### Bachelor of Science in Nursing (BNP)

The BNP offers a program of study which combines general education courses with professional nursing theory and clinical education. The program prepares the graduates for the role of the professional nurse and provides a foundation for graduate study. Graduates of the program are eligible to take the National Council Licensure Examination for Registered Nurses. The BNP also has a Post-Licensure (RN Track) component where graduates of associate degree and diploma nursing programs may pursue the baccalaureate degree. The BNP is accredited by the Commission on Collegiate Nursing Education (CCNE):

**One DuPont Circle NW**  
Suite 530  
Washington, DC  20036  
202-887-6791

#### BNP Pre-Licensure Admission Requirements and Procedures

The BNP has a selective admission procedure and enrollment is limited. In the event there are more qualified applicants than available positions, students with the highest GPA will be accepted.

**BNP Pre-Licensure Application Procedure**

1. Be unconditionally admitted to MSU.
2. Declare nursing as an area of concentration.
   a. Meet with assigned nursing faculty advisor
   b. Enroll in required pre-nursing courses as outlined in the BNP curriculum sequence.
3. Submit a completed application packet to the Baccalaureate Nursing Program. The application packet includes:
   a. Completed BNP application.
   b. Copy of high school transcript(s).
   c. GED validation if applicable.
   d. Transcript from MSU and a copy of transcripts from all universities and colleges attended, if courses not listed on MSU transcript.
   e. Nursing transfer student: in addition to the above materials must submit:
BNP Pre-Licensure Admission Criteria

The BNP has a limited enrollment. In the event there are more qualified applicants than available positions, students with the highest GPA will be accepted. Applicants to the BNP are selected based upon the following criteria:

1. Completion of the 35 credit hours of the required pre-nursing courses listed in the curriculum sequence for the first year
2. A GPA of 2.5 or above (with no rounding) based on the required 35 credits with no grade being less than a "C."
3. A minimum grade point average of 2.5 or above for BIOL 234 - Anatomy & Physiology I, BIOL 235 - Anatomy & Physiology II, and MATH 135: — Math for Technical Students (or the equivalent).
4. A required composite score of 19 or above on the enhanced ACT or 50th percentile or above on the NLN PAX-RN Exam.
5. More than two failures of any two required courses within three years of application to the program will result in ineligibility for admission. Students with course failures prior to the three-year period will be considered for admission if the student has demonstrated satisfactory academic progress ("C" or above in required courses) since the course failures. Full-time study for two consecutive semesters will be required to evaluate academic status. At least two-thirds of these credit hours must be in program required general education or support courses. This policy also applies to transfer students.
6. Applicants who are currently enrolled but have not yet completed the required 18 semester hours of the second semester are eligible for conditional acceptance based on midterm grades. A copy of current midterm grades must be submitted with the application packet or as soon as available after the application deadline. Final acceptance will be dependent on maintaining course grades and GPA as outlined in the above criteria.
7. Compliance with the Technical Performance Standards.
8. Possess current certification by American Heart Association in Basic Life Support for Health Care Providers (CPR).
9. Documentation of compliance with all health requirements.

BNP - Post-Licensure (RN Track) Component Admission Requirements and Procedures

Application Procedure

1. Be unconditionally admitted to MSU.
2. Declare nursing as the area of concentration and meet with assigned nursing faculty advisor.
3. Submit required materials listed below to the Baccalaureate Nursing Program by March 15 for admission into the Fall Semester or Sept. 1 for admission into the Spring Semester:
   a. Completed BNP application.
   b. Transcripts from MSU and all universities/colleges attended if courses not listed on MSU transcript.
   c. Nursing transfer student: in addition to the above materials must submit:
      I. University undergraduate catalog(s) if transfer credit is sought;
      II. Syllabi for nursing course(s) to be evaluated for transfer credit; and
      III. Letter of recommendation from the director/ coordinator of the nursing program from which the student is transferring.
   d. Validation of current Kentucky nursing licensure.
   e. Validation of current American Heart Association certification in Basic Life Support for Healthcare Providers (CPR).
   f. Verification of professional malpractice insurance.

Regional Academic Counseling Coordinator
BNP Post-Licensure Track Component
Department of Nursing
Center for Health, Education and Research (CHER) Suite 201
Morehead State University
Morehead, KY 40351

BNP Post-Licensure (RN Track) Component Admission Criteria

Applicants must:

1. Be unconditionally admitted to MSU.
2. Hold an active and unrestricted license to practice as a RN in the state where the practicum will take place.
3. Be a graduate of an Associate Degree Nursing or Diploma program. The diploma graduate must satisfactorily complete national standardized exams for the RN student which generates academic credit for diploma level nursing courses.
4. Have completed 53 credit hours of prescribed general education and support courses required for a bachelor's degree in nursing.

5. Hold a minimum cumulative grade point average of 2.5 on all coursework required for admission to the post-licensure component of the Baccalaureate Nursing Program.

6. Hold a minimum grade of "C" in each of the required general education, support and nursing courses.

7. Possess current certification by the American Heart Association (AHA) cardiopulmonary resuscitation (CPR) in Basic Life Support for Healthcare Providers.

8. Possess professional malpractice insurance.


10. Provide documentation of immunization requirements.

11. Provide documentation of a criminal background check.

Baccalaureate Degree Nursing - BNP Post-Licensure

**General Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101/CHEM 101L</td>
<td>Survey of Chemistry (NSC2)</td>
<td>4</td>
</tr>
<tr>
<td>NURB 499C</td>
<td>Advanced Nursing Practicum</td>
<td>6</td>
</tr>
</tbody>
</table>

**General Education Total** 40

*Refer to the General Education section for a complete listing of general education requirements.*

Successful completion of MATH 135, PSY 154 and SOC 203 is recommended.

**Program Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURB 375</td>
<td>K credit lower level nursing courses</td>
<td>32K</td>
</tr>
<tr>
<td>NURB 326</td>
<td>Advanced Health Assessment</td>
<td>2</td>
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<tr>
<td>NURB 327</td>
<td>Transition to Prof. Nursing Practice</td>
<td>4</td>
</tr>
<tr>
<td>NURB 361</td>
<td>Introduction to Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>NURB 424</td>
<td>Public Health</td>
<td>3</td>
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<tr>
<td>NURB 461</td>
<td>Nursing Leadership and Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Requirements Total** 47

*K* credit of 32 hours awarded for lower division nursing courses following successful completion of NURB 326, NURB 327, and admission into the post-licensure program.

**Supplemental Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BIOL 217/BIOL 217L</td>
<td>Elementary Medical Biology</td>
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<td>BIOL 235</td>
<td>Human Anatomy and Physiology II</td>
<td>3</td>
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<tr>
<td>BIOL 336</td>
<td>Pathophysiology</td>
<td>4</td>
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<tr>
<td>MATH 353</td>
<td>Statistics</td>
<td>3</td>
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<tr>
<td>NURS 345</td>
<td>Global Health</td>
<td>3</td>
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<tr>
<td>NURS Elective 300 or higher</td>
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<tr>
<td>PSY 156</td>
<td>Lifespan Developmental Psychology</td>
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**Supplemental Requirements Total** 26

**Components of Degree Requirement**

<table>
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<tr>
<th>Category</th>
<th>Credit Hours</th>
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<td>Program Requirements</td>
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<td>Supplemental Requirements</td>
<td>26</td>
</tr>
<tr>
<td>General Electives</td>
<td>7</td>
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</table>

**Degree Requirement Total** 120

Notes:

NURB 326 — Advanced Health Assessment for the RN and NURB 327 — Transition to Professional Nursing are open to any registered nurse and may be taken prior to official admission to the BNP Post-Licensure (RN-BSN) Component.

After satisfactory completion of NURB 327 — Transition to Professional Nursing and NURB 326 — Advanced Health Assessment and official admission to the RN-BSN component of the Baccalaureate Nursing Program, 32 credit hours will be awarded for lower level nursing courses.

The University requires 42 credit hours of courses numbered 300 and above. To obtain the required number of hours, the student must take two free electives and two nursing electives at the 300 or above level.

Progression to any nursing course required in semester two and semester three of the RN-BSN Online Program curriculum, the final semester of the RN-BSN curriculum will be restricted to unconditional/officially admitted students.

Baccalaureate Degree Nursing - BNP Pre-Licensure

BNP policies on challenge examination, transfer credit, academic standards and progression, and criteria for taking challenge exams can be obtained from the Department of Nursing.

**General Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
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<td>Survey of Chemistry (NSC2)</td>
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<tr>
<td>NURB 499C</td>
<td>Advanced Nursing Practicum</td>
<td>6</td>
</tr>
</tbody>
</table>

**General Education Total** 40

*Refer to the General Education section for a complete listing of general education requirements.*

Successful completion of MATH 135, PSY 154 and SOC 203 is recommended.

**Program Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>NURB 260</td>
<td>Wellness and Health Promotion</td>
<td>2</td>
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<td>NURB 262</td>
<td>Foundational Skills for Prof. Nursing</td>
<td>6</td>
</tr>
<tr>
<td>NURB 264</td>
<td>Family Health Nursing</td>
<td>6</td>
</tr>
<tr>
<td>NURB 266</td>
<td>Community-Based Nursing Care</td>
<td>5</td>
</tr>
<tr>
<td>NURB 320</td>
<td>Care of Older Adults</td>
<td>5</td>
</tr>
<tr>
<td>NURB 322</td>
<td>Mental Health Nursing</td>
<td>4</td>
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<tr>
<td>NURB 324</td>
<td>Acute Alterations in Adult Health I</td>
<td>7</td>
</tr>
<tr>
<td>NURB 326</td>
<td>Advanced Health Assessment</td>
<td>2</td>
</tr>
<tr>
<td>NURB 361</td>
<td>Introduction to Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>NURB 420</td>
<td>Acute Alterations in Adult Health II</td>
<td>7</td>
</tr>
<tr>
<td>NURB 422</td>
<td>Chronic Alterations in Health</td>
<td>5</td>
</tr>
<tr>
<td>NURB 424</td>
<td>Public Health</td>
<td>3</td>
</tr>
<tr>
<td>NURB 461</td>
<td>Nursing Leadership and Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Requirements Total** 58

*K* credit of 32 hours awarded for lower division nursing courses following successful completion of NURB 326, NURB 327, and admission into the post-licensure program.

**Supplemental Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 217/BIOL 217L</td>
<td>Elementary Medical Biology</td>
<td>4</td>
</tr>
</tbody>
</table>
BIOL 235 — Human Anatomy and Physiology II 3
BIOL 336 — Pathophysiology 4
MATH 353 — Statistics 3
NURS 345 — Global Health 3
NURS Elective 3
PSY 156 — Lifespan Developmental Psychology 3
**Supplemental Requirements Total** 23

**Components of Degree Requirement**
General Education Requirements 40
Program Requirements 58
Supplemental Requirements 23
**Degree Requirement Total** 121

The student will be required to complete the course sequence approved by the University and in place at the time of admission into the BNP. The generic (pre-licensure) sequence follows:

*Admissions procedures, curriculum requirements and course sequencing may be changed as part of the process of annual program evaluation. It is the applicant’s responsibility to verify current application criteria and procedures prior to the application deadline.*

**MSU/UK Physician Assistant Program**
Physician Assistant Program
Center for Health, Education and Research (CHER) Suite 202
606-783-2051

**For More Information Contact:**
Michael Cooper, Program Director
Michael.Cooper@uky.edu
606-783-2051
### Course Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
<td>Accounting</td>
</tr>
<tr>
<td>AGR</td>
<td>Agriculture</td>
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<td>APS</td>
<td>Appalachian Studies</td>
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<td>ART</td>
<td>Art</td>
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<td>ASTR</td>
<td>Astronomy</td>
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<td>BIOL</td>
<td>Biology</td>
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<td>BIS</td>
<td>Business Information Systems</td>
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<td>CHEM</td>
<td>Chemistry</td>
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<td>CHI</td>
<td>Chinese</td>
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<td>CIS</td>
<td>Computer Information Systems</td>
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<td>CMAP</td>
<td>Communication (Advertising/Public Relations)</td>
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<td>CMEM</td>
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<td>CMJN</td>
<td>Communication (Journalism)</td>
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<td>CMSP</td>
<td>Communication (Speech)</td>
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<td>CTMR</td>
<td>Computed Tomography/Magnetic Resonance</td>
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<td>DMS</td>
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<td>ECON</td>
<td>Economics</td>
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<td>Education (Adult and Higher)</td>
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<td>EDEC</td>
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<td>EDEE</td>
<td>Education (Early Elementary — P-5)</td>
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<td>EDEL</td>
<td>Education (Elementary)</td>
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<td>EDEM</td>
<td>Education (Early Elem. and Middle Grades)</td>
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<td>EDF</td>
<td>Education (Foundations)</td>
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<td>EDGC</td>
<td>Education (Guidance and Counseling)</td>
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<td>EDMG</td>
<td>Education (Middle Grades — 5-9)</td>
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<td>ENG</td>
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<td>IECE</td>
<td>Interdisciplinary Early Childhood Education</td>
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<td>IET</td>
<td>Industrial and Engineering Technology (Applied Engineering &amp; Technology)</td>
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<td>IMS</td>
<td>Imaging Sciences</td>
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<td>IST</td>
<td>International Studies</td>
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<td>ITCD</td>
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<td>ITCG</td>
<td>Computer Aided Graphics</td>
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<tr>
<td>ITCM</td>
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<td>ITEC</td>
<td>Electrical, Electronics, Telecom. and Computer Technology</td>
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<td>Veterinary Technology</td>
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<tr>
<td>WST</td>
<td>Women's Studies</td>
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</tbody>
</table>
NOTE: Courses are arranged alphabetically by discipline (course prefix).

NOTE: (3-0-3) following a course title means three hours class, no laboratory, three hours credit. Roman numerals I, II, III following the credit hour allowance indicate the term in which the course is normally scheduled: I — Fall, II — Spring, III — Summer. Many required courses are on a rotation. Students should plan their semesters according to when these courses are offered.

ACCT - Accounting Courses

ACCT 281. Principles of Financial Accounting. (3-0-3); I, II.
An introduction to financial accounting and financial reporting for business. Topics covered include: how decision makers use balance sheets, income statements, and other information found within financial statements; the accounting cycle; accounting and reporting of balance sheet accounts and their articulated income statement accounts.

ACCT 282. Principles of Managerial Accounting. (3-0-3); I, II.
Prerequisite: ACCT 281. An introduction to managerial accounting and decision making. Topics covered include: job order costing, process costing, activity-based costing, cost-volume-profit relationships, the statement of cash flows and financial statement analysis.

ACCT 339. Cooperative Education III. (1 to 8 hrs.); I, II.
Prerequisite: consent of departmental cooperative education coordinator required. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (ACCT 339/439) available for option credit.

ACCT 375. Accounting Analysis and Financial Decision Making. (3-0-3); on demand.
Prerequisites: ACCT 282, CIS 101, FIN 360. Interpretation and development of accounting and financial data and statements incorporating spreadsheet analysis and applications. Equates with FIN 375.

ACCT 381. Intermediate Accounting I. (3-0-3); on demand.
Prerequisites: ACCT 281 and 282 with a minimum grade of "C." The first of three intermediate-level financial accounting courses. Topics covered will include study of: the environment under which accounting standards are established; the conceptual framework for financial accounting; the accounting cycle; requirements for the presentation of the income statement, balance sheet, and statement of cash flows, time value of money concepts; and accounting for cash, accounts receivable and inventories.

ACCT 382. Intermediate Accounting II. (3-0-3); on demand.
Prerequisite: ACCT 381 with a minimum grade of "C." The second of three intermediate-level financial accounting courses. Topics covered will include accounting for: acquisition and depreciation of fixed assets, intangible assets, current liabilities, contingencies, long-term liabilities, stockholders' equity, retained earnings, dilutive securities, earnings per share, investments, and revenue recognition.

ACCT 383. Intermediate Accounting III. (3-0-3); on demand.
Prerequisite: ACCT 381. The third of the three intermediate-level financial accounting courses. Topics covered will include accounting for: income taxes, pensions, postretirement benefits, leases, changes and errors, and changing prices. Other topics include the cash flow statement, basic financial statement analysis, and methods of full disclosure.

ACCT 387. Income Tax. (3-0-3); I.
Prerequisite: ACCT 282 with a minimum grade of "C." Income tax legislation, federal and state; returns for individuals; gross income; basis for gains and losses; capital gains and losses; dividends; deductions; withholding.

ACCT 388. Practice in Personal Tax Accounting. (3-3-3); on demand.
Prerequisites: ACCT 387 and consent of instructor. Income tax legislation, federal and state; preparing returns for elderly and low income individuals; gross income; capital gains and losses; dividends; interest; deductions; withholdings. Available for option credit.

ACCT 390. Cost Accounting I. (3-0-3); on demand.
Prerequisite: ACCT 282 with a minimum grade of "C." Control and classification of manufacturing costs, job order and process cost analysis; materials, labor, and overhead analysis; joint and by-product costing.

ACCT 391. Accounting Information Systems. (3-0-3); on demand.
Prerequisite: ACCT 282 with a minimum grade of "C." Examination of accounting information systems within a context of contemporary technology. The course focuses on terms, concepts, and technology found within the accounting information systems environment; accounting cycles and control of accounting information systems; theory and practices relating to systems development; and reporting practices related to accounting information systems.
ACCT 399. Selected Workshop Topics. (1 to 4 hrs.); on demand.
Workshops on various accounting subjects will be presented periodically. These workshops supplement the basic accounting courses. Credit toward degree programs must be approved by the student’s advisor and the department chair.

ACCT 428. Governmental Accounting. (3-0-3); on demand.
Prerequisite: ACCT 282 or equivalent with a minimum grade of "C." Study of fund accounting techniques for government accounting terminology and budgeting processes; operations of general revenue and expense, capital project, debt service, trust, intragovernment, special assessment, and enterprise funds analysis of fixed assets and liabilities, and basics of hospital and public school fund accounting.

ACCT 439. Cooperative Education IV. (1 to 8 hrs.); I, II.
Prerequisite: consent of departmental cooperative education coordinator required. Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a senior-level status. Maximum of three hours of cooperative education credit (ACCT 339/439) available for option credit.

ACCT 475. Controllership. (3-0-3); on demand.
Prerequisite: ACCT 282 or equivalent with a minimum grade of "C." Emphasis on appreciation of the function of the controller in a contemporary business organization. Planning for control, reporting, and interpreting operation results, evaluating new programs, tax administration and other types of required government reporting, economic appraisal of programs, and the protection of assets.

ACCT 476. Special Problems in Accounting. (1 to 3 hrs.); on demand.
Prerequisites: completion of 18 hrs. in accounting, senior standing in accounting and consent of department chair. This course is an independent study of an accounting problem of special interest. Students must present in writing a suggested problem and justification for the study prior to registration. Each request will be considered on its own merit in relation to the special needs of the students.

ACCT 482. Advanced Accounting. (3-0-3); on demand.
Prerequisite: ACCT 382 with a minimum grade of "C." Accounting for requisitions, consolidations, and mergers; purchasing and pooling methods of business combinations, parent and subsidiary accounting for consolidated balance sheets; income statements; statement of changes in financial position; international operations; partnerships; installment sales; consignments; home office and branch accounting.

ACCT 483. Auditing. (3-0-3); on demand.
Prerequisite: ACCT 382 with a minimum grade of "C." Accounting principles applied to internal control systems; audit working papers; detail audit; internal audit; special and fractional audits; audit reports; tests and procedures used in auditing, ethical responsibilities of CPAs.

ACCT 485. Forensic Accounting. (3-0-3); on demand.
Prerequisites: ACCT 381 and ACCT 387 with a minimum grade of "C." An introduction to the fundamental concepts, as well as the more complex and developing issues of modern forensic accounting. Topics include: fraud auditing, litigation support, cybercrime, and business valuations.

ACCT 486. Accounting Internship. (1 to 4 hrs.); on demand.
Prerequisites: completion of 18 hrs. in accounting and consent of department chair. On-the-job professional experience in accounting working under the supervision of a CPA arranged through cooperating public accounting firms and governmental agencies.

ACCT 487. Advanced Tax Accounting II. (3-0-3); on demand.
Prerequisite: ACCT 387 with a minimum grade of "C." Federal income tax report preparation with emphasis on partnership and corporation returns; estate and trust taxation; gift tax; special problems in taxation, tax research.

ACCT 490. Cost Accounting II. (3-0-3); on demand.
Prerequisite: ACCT 390 with a minimum grade of "C." Cost analysis for planning, evaluation, and control. Standard costs, direct costing, budgets, cost and profit analysis, alternative choice decisions, linear programming, capital budgeting.

ACCT 495. Business Valuations. (3-0-3); on demand.
Prerequisites: ACCT 383, ACCT 387, FIN 360. A study of the principles, applications and models for valuing various types of businesses, in various industries, and for various purposes, such as mergers, estates, litigation, etc. Also includes regulations governing business valuation reports.

AGR - Agriculture Courses

AGR 101. Orientation to Agriculture. (1-0-1); I.
The importance of agriculture in the community, state, nation, and world, including career opportunities.

AGR 102. Agricultural Experience. (1 to 2 hrs.); I, II, III.
The course is designed to provide students with basic competencies in the agricultural sciences. Enrollment is limited to students in agricultural programs. Students are required to complete two credit hours.

AGR 108. Elementary Horsemanship (Stock Seat). (0-2-1); I, II.
Includes riding basics in relation to stock seat, such as leading a horse, bridling and saddling, grooming, mounting, dismounting, stopping, starting, turning the horse, riding at different gaits, horsemanship safety and ring etiquette, plus general overall knowledge of horses.
AGR 109. Elementary Horsemanship (Saddle Seat). (0-2-1); I, II.
Includes riding basics in relation to saddle seat, such as leading a horse, checking saddle and bridle; mounting and dismounting, stopping, starting, turning, and backing the horse; riding horses at different gaits, horsemanship safety and ring etiquette; plus general overall knowledge of horses. Equates with PHED 109.

AGR 110. Elementary Horsemanship (Hunt Seat). (0-2-1); I, II.
Includes riding basics in relation to hunt seat, such as leading a horse, checking saddle and bridle; mounting and dismounting, stopping, starting, turning, and backing the horse; riding horses at different gaits, horsemanship safety and ring etiquette; and general overall knowledge of horses.

AGR 118. Intermediate Horsemanship (Stock Seat). (0-2-1); I, II.
Includes review of elementary horsemanship (stock seat) techniques; handling horses properly from the ground; grooming and tacking-up; more advanced riding skills such as leg and rein aids; correct body position; halts, turns, and figure work; trail riding; and parts of the horse, bridle, and saddle, in relation to western riding.

AGR 119. Intermediate Horsemanship (Saddle Seat). (0-2-1); I, II.
Includes review of elementary horsemanship (saddle seat) techniques; handling horse properly from ground; grooming, tacking-up; more advanced riding skills such as leg aids, rein aids, and canter leads; detailed study of gaits, equipment, and dress; and trail riding and showing horses, parts of the horse, bridle, and saddle.

AGR 120. Intermediate Horsemanship (Hunt Seat). (0-2-1); I, II.
Intermediate review of elementary horsemanship (hunt seat) techniques; handling horse properly from ground; grooming, tacking-up; more advanced riding skills such as leg aids, rein aids, and canter leads; detailed study of gaits, equipment, and dress; and trail riding and showing horses, parts of the horse, bridle, and saddle.

AGR 133. Introduction to Animal Science. (2-2-3); I, II.
Fundamental genetics, nutrition, and physiology of beef and dairy cattle, swine, sheep, and horses.

AGR 143. Anatomy and Physiology of Livestock. (3-0-3); I.
An introduction to the comparative anatomy and physiology of common livestock species, including horses, beef and dairy cattle, swine, sheep, and goats. The focus of this course will be on the structure and function of the various organ systems of livestock and how they relate to management practices.

AGR 180. Introduction to Field Crops. (2-2-3); II.
A study of the national and international distribution and importance of major food, feed, oil, fiber, and miscellaneous crops; natural requirements and human inputs for production; current practices in production technology; crop morphology.

AGR 185. Current Food and Energy Issues. (3-0-3); II.
A course designed to increase the understanding, awareness, and critical analysis of contemporary food, energy, and natural resource issues and their effect upon the social, political, economic and cultural aspects of society. Topics will include food safety, food production, genetically-modified foods, niche food markets, energy sources, renewable fuels, energy sustainability, global warming, limited natural resources, water rights, water quality, and soil nutrient management. *This course satisfies the SBS II requirement for general education.*

AGR 202. Agricultural Plants and Humanity. (3-0-3); I.
The roles agronomic and horticultural plants play in the improved physical and mental health of individuals, in the social and cultural development of countries and communities, and in maintaining an ecologically-sound planet.

AGR 204. World Food. (3-0-3); II.
Analysis of contemporary problems and issues of public concern relating to food, agriculture, and rural areas using the tools of fundamental economic concepts. Farm income, food prices, world food problems, natural resources, environment, and rural development issues will be studied. Equates with IST 204.

AGR 205. Farm Records. (3-0-3); on demand.
Development and application of farm records necessary for farm business analysis, including a study of types of inventories, depreciation schedules, cost determining, and record keeping.

AGR 211. Soils. (2-2-3); I, III.
Prerequisite: CHEM 101. Study of origin, formation, composition, and classification of soils; the physical, chemical, and biological properties of the soil; texture, structure, and nutrient holding capacities in relation to plant growth and soil management.

AGR 212. Landscape Plants. (2-2-3); on demand.
A study of ornamental trees, shrubs, and vines commonly used in landscaping. Emphasis is placed on identification, characteristics, adaptability, and maintenance.

AGR 213. Landscape Design. (2-2-3); on demand.
Prerequisite: AGR 212. An introduction to residential landscape design. Emphasis on the design process, design principles, and selection of plants and man-made materials.

AGR 215. Horticultural Science. (2-2-3); II.
A study of the basic principles underlying horticultural practices in fruit growing, vegetable gardening, landscape gardening, and floriculture.

AGR 217. Principles of Agricultural Leadership. (3-0-3); I, II.
Prerequisite: AGR 133. This course will provide students with an overview of leadership concepts as they relate to agriculture. Stu-
AGR 218. Principles of Food Science. 
(3-0-3); II.
A broad study of food sciences including nutritional values, food processing and storage, microorganisms, food-borne illnesses, and the regulatory agencies involved. This course will enable any student to be better educated about the food they consume.

AGR 221. Equitation. 
(1-4-3); I.
Study and application of basic equitation techniques as it applies to various breeds and styles of riding. Figure work.

AGR 222. Livestock Evaluation. 
(2-2-3); II, odd years.
Prerequisite: AGR 133. An introduction to growth, development and fattening of meat animals. Evaluation of live animal and carcase characteristics of cattle, sheep and swine.

(2-2-3); on demand.
Prerequisite: AGR 215. Study of the greenhouse industry, media, watering, fertilization, insects, diseases, chemical growth regulators, hydroponics, and cost-accounting.

AGR 233. Animal Diseases and Parasites. 
(2-2-3); I, odd years.
Prerequisite: AGR 133. Study of the diseases and parasites of food animals. Mechanisms of disease processes, treatments, and preventative measures for the common pathologic conditions in livestock. Environmental and management factors that impact diseases and parasites will also be studied.

AGR 235. Supervised Work Experience. 
(1 to 6 hrs.); I, II, III.
Prerequisite: consent of the instructor required. A supervised work experience program for students planning careers in agriculture upon completion of the associate degree program.

AGR 239. Cooperative Education. 
(1 to 12 hrs.); I, II, III.
Prerequisite: consent of department chair. Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a sophomore level course.

AGR 243. Equine Health and Disease. 
(2-2-3); II.
A general study of the anatomy and physiology of the horse, first aid, diseases and parasites, normal and abnormal behavior and how they relate to herd health management.

AGR 245. Horseshoeing. 
(2-2-3); on demand.
The fundamentals of horseshoeing; the basic use of farrier tools; anatomy and physiology of the foot, pastern, and legs. Trimming feet, fitting and nailing shoes, normal and corrective shoeing.

AGR 251. Introduction to Agricultural Mechanics. 
(2-2-3); II.
Farm shop organization; shop safety; selection, use, and maintenance of hand and power tools and equipment for construction and maintenance in agriculture; practical exercises and projects to develop essential skills.

AGR 261. Information Acquisition and Analysis. 
(2-2-3); I.
The study of the processes used in collecting, organizing, evaluating, and presenting data and information through the use of computerized data collection and analysis systems. Application software commonly used in the various disciplines of Agricultural Sciences.

AGR 300. Pest Management. 
(2-2-3); II.
Studies in the nature and management of agricultural pests. Discussion will include but not be limited to such topics as pest types; pest damage; cultural, biological, and chemical management strategies; integrated pest management; economic, health, and safety perspectives; and utilization techniques.

AGR 301. Farm Management. 
(3-0-3); I.
Farm organization, fitting livestock and cropping programs into a functioning unit, profit maximization and least cost combination of resources for a specified level of production.

AGR 302. Agriculture Finance. 
(3-0-3); on demand.
A study of farm capital structure and needs. The policy and practices of institutions offering credit to farmers are analyzed.

AGR 303. Land Economics. 
(3-0-3); on demand.
Farm selection and appraisal of land resources; adaptation of land as the basis for farm organization and agricultural production; study of land tenure systems; rights of ownership; recreational possibilities of nonproductive land.

AGR 305. Marketing of Farm Products. 
(3-0-3); on demand.
Development of geographical specializations, demand and supply schedules of agricultural products, price equilibrium, long and short run cyclical price movements, hedging in futures, demand expansion, increasing operational and pricing efficiency, specific commodity marketing.

AGR 306. Principles of Epidemiology in Agriculture. 
(3-0-3); II.
Prerequisites: MATH 135 and BIOL 150. Restrictions: junior standing or above. This course will offer an overview of the science of epidemiology as it relates to agriculture. Students will develop an understanding of causation and casual theory, measurements of disease occurrences, biases in study designs, random error and the role statistics play in scientific study, how to control confounding, and how epidemiology is used in a clinical setting. This course will benefit any student seeking a career in a research or clinical field.

AGR 308. Weed Science. 
(2-2-3); I, even years.
Prerequisite: AGR 180. Identification and classification of weed species, methods of reproduction, and growth characteristics.
Effects on livestock, crop yield and quality, and human well-being; management methods and technology.

**AGR 310. Stocker and Feedlot Cattle Management.**
(3-0-3); II.
*Prerequisite: AGR 133.* This course will provide students with information on the stocker, receiving and feedlot segments of the beef industry, information on the management, marketing, and evaluation of these segments will be covered. This course will require intensive use of oral and written communication.

**AGR 311. Soil Conservation.**
(2-2-3); I.
*Land resources, capabilities, and uses; land use planning; agricultural, construction, mining, and other use effects on soil resources, geologic and accelerated erosion; soil pollution, economic factors which influence production; producing for fresh and processing markets; varieties, pest control, cultural practices, and mechanization.*

**AGR 312. Soil Fertility and Fertilizers.**
(3-0-3); II, odd years.
*Prerequisite: AGR 211.* A study of plant nutrient needs and uptake; soil nutrient supplying ability; nutrient - soil interactions; chemical forms; fertilizer source materials and manufacture; soil testing and fertility management; economic fertilizer use.

**AGR 314. Plant Propagation.**
(2-2-3); II, even years.
*Prerequisite: AGR 215.* A study of the principles and practices of the propagation of horticultural plants. Includes seeding, layering, cutting, division, grafting, and budding.

**AGR 315. Fruit Production.**
(2-2-3); I, on demand.
*Prerequisite: AGR 215.* Tree fruits, nuts, and small fruits; varieties, sites, soils, pruning, pest control, planning, and commercial marketing.

**AGR 316. Feeds and Feeding.**
(2-2-3); I.
*Prerequisites: AGR 133 and CHEM 201.* Feeds and formulation of rations; fats, carbohydrates, proteins, and their digesting; the role of minerals, vitamins, and feed additives in nutrition.

**AGR 317. Floral Design.**
(2-2-3); I, II.
*A beginning course for floral design dealing with basics in arranging fresh, dried, and permanent flowers and foliage.

**AGR 318. Landscape Maintenance.**
(2-2-3); on demand.
*Prerequisites: AGR 212 and 215.* Basic maintenance of tree, shrub, ground cover, and annual plants, including fertilizing, mulching, pests, planting, pruning, training, and watering.

**AGR 319. Herbs.**
(2-2-3); on demand.
*Prerequisite: AGR 215 or BIOL 150.* A study of the history, culture, uses, and marketing of culinary, medicinal, and aromatic herbs.

**AGR 320. Principles of Vegetable Production.**
(2-2-3); on demand.
*Prerequisite: AGR 215.* Principles of commercial and home vegetable production and handling. Includes soil; ecological and economical factors which influence production; producing for fresh and processing markets; varieties, pest control, cultural practices, and mechanization.

**AGR 323. Interior Landscaping.**
(2-2-3); on demand.
*Prerequisite: AGR 215.* Design, selection of plants, installation, and maintenance of interior landscapes in offices, homes, and public buildings.

**AGR 324. Greenhouse Structures.**
(2-2-3); on demand.
*Prerequisite: AGR 215.* Study of factors involved in locating, constructing, and equipping a greenhouse. Studies include coverings, heating, cooling, ventilating, CO2 injectors, benches, watering and fertilizer application systems, supplemental lighting, environmental control systems, and hothouses.

**AGR 325. Turf Management.**
(2-2-3); I, odd years.
*Prerequisite: AGR 215.* Turf grass varieties, basic principles of production and their practical application to establishment, maintenance, renovation, and pest control on lawns, playgrounds, and sports turf areas.

**AGR 326. Nursery Management.**
(2-2-3); on demand.
*Prerequisites: AGR 215 and 314.* Selection, systems of culture, harvesting and management of ornamental trees, shrubs, and vines.

**AGR 327. Advanced Landscape Design.**
(2-2-3); on demand.
*Prerequisites: AGR 212 and 213.* Selection and location of ornamental plants for large properties such as schools, playgrounds, estates, apartment complexes, and factories. Preparing specifications and bids.

**AGR 328. Floral Crop Production.**
(2-2-3); on demand.
*Prerequisites: AGR 215 and 224.* Production of bedding plants, flowering potted plants, cut flowers, and foliage plants.

**AGR 329. Advanced Stock Seat Horsemanship.**
(1-4-3); II, odd years.
*Develop skills of performance equitation. Specific skills needed in the training or showing of western horses, halter, pleasure, and reining.*

**AGR 330. Livestock Improvement.**
(2-2-3); II, odd years.
*Prerequisite: AGR 133.* Study of the principles, practices, and procedures of animal breeding, selection and mating systems and their application for farm livestock production and improvement.

**AGR 332. Advanced Saddle Seat Horsemanship.**
(1-4-3); II, even years.
*Develop skills of performance equitation. Specific skills needed in driving, training, and showing of saddle seat style horses.*

**AGR 333. Advanced Hunt Seat Horsemanship.**
(1-4-3); I, even years.
*Develop skills of performance equitation. Specific skills needed in driving, training, and showing of saddle seat style horses.*
training or showing of hunter horses, jumping and course design.

**AGR 335. Equitation Teaching.**
(2-2-3); II, odd years.
*Prerequisite: AGR 221.* The techniques of horsemanship and methods of equitation instruction.

**AGR 336. Dairy Production.**
(2-2-3); II, odd years.
*Prerequisite: AGR 133.* A general study of the factors involved in the management of a dairy cow herd, including herd operation, records, breeding programs, diseases and principles of nutrition.

**AGR 337. Poultry Production.**
(2-2-3); I, even years.
*Prerequisite: AGR 133.* Principles of poultry production including common breeds of chickens, incubation, breeding, housing, nutrition, diseases, and general management practices.

**AGR 338. Livestock Judging.**
(1-5-3); II, odd years.
Study and practice of the principles of livestock judging. The student will be expected to gain an understanding of phenotypic appearance as it relates to important economic traits and genetic improvement of livestock.

**AGR 339. Cooperative Education.**
(1 to 12 hrs.); I, II, III.
*Prerequisite: consent of department chair.* Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a junior level course.

**AGR 342. Horse Production.**
(2-2-3); I, even years.
A general study of the history and development of breeds of the horse, the relationship of form to function, horse selection, horse breeding, feeding and genetics.

**AGR 343. Beef Production.**
(2-2-3); I, odd years.
*Prerequisite: AGR 133.* The history, development, and distribution of breeds; sources of cattle and carcass beef; production and distribution practices in steer feeding; commercial and purebred breeding herds.

**AGR 344. Swine Production.**
(2-2-3); I, even years.
*Prerequisite: AGR 133.* History, development, and distribution of types of breeds; management practices, including disease problems in commercial and purebred herds.

**AGR 345. Sheep Production.**
(2-2-3); II, even years.
*Prerequisite: AGR 133.* History, development, and distribution of types and breeds; selection, breeding, feeding, and management of sheep; production and handling of wool.

**AGR 350. Farm Power and Machinery Management.**
(2-2-3); I.
Selection, operation, maintenance, and servicing of agriculture power and machinery units.

**AGR 360. Commercial Agricultural Industries.**
(3-0-3); III.
*Prerequisite: consent of instructor.* This course will provide students with an opportunity to travel to an area(s) of the United States and tour commercial agricultural industries. Travel expenses will be distributed among the students participating. Locations and tours will vary.

**AGR 380. Equine Management.**
(2-2-3); I, odd years.
Management and practices in various horse operations as they relate to buildings and equipment, sanitation, pasture and feed selection, supervision of laborers, public relations, legalities and liabilities, and record keeping systems.

**AGR 384. Forage Crops.**
(2-2-3); II, even years.
*Prerequisite: AGR 180.* The distribution of various forage crops and their adaptations to soil and climate; seeding rates and mixtures; productivity; pest control; and preservation and utilization methods.

**AGR 385. Agribusiness Management.**
(3-0-3); on demand.
Management of the agribusiness functions, responsibilities, and operational characteristics unique to an agriculturally related business, particularly cooperatives.

**AGR 386. Introduction to Agricultural Policy.**
(3-0-3); on demand.
A history of agricultural policy and policy making; defining the problems and their settings, government participation in supply and demand for agricultural products.

**AGR 402. Advanced Agricultural Experience.**
(1 to 2 hrs.); I, II, III.
*Consent required.* The course is designed to provide students with advanced competencies and agricultural management skills in the option they have chosen. Enrollment is limited to students in agricultural programs.

**AGR 405. Farm Business Analysis.**
(2-2-3); on demand.
A basic course in the applicability of farm records to the efficiency analysis of whole farms and of specific enterprises. Actual university farm enterprises will be used to provide the data source for laboratory work.

**AGR 410. Principles of Meat Science.**
(3-0-3); II.
*Prerequisites: AGR 133 and AGR 143.* This course will provide students with information on meat produced by cattle, swine, sheep, poultry, seafood, and other species on a local, national, and international level, as well as information on the conversion of muscle to meat and the inspection, grading and evaluation of these products. This course will require intensive use of oral and written communication.

**AGR 412. Conservation Workshop.**
(2-2-3); on demand.
Development of the conservation movement with broad treatment of the basic natural resources, including land, water, air,
minerals, forests, and wildlife. May be repeated, but not to exceed total of six hours.

(2-2-3); II.  
**Prerequisite:** AGR 316. Chemistry, metabolism, and physiological functions of nutrients; digestibility, nutritional balances, and measures of food energy.

AGR 439. Cooperative Education.  
(1 to 12 hrs.); I, II, III.  
*Consent required.* Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level course.

AGR 474. Adult and Young Farmer Education.  
(3-0-3); on demand.  
The principles and techniques needed in organizing and program planning in post high school vocational agricultural education and conducting young farmer and adult farmer classes.

AGR 476. Special Problems.  
(1 to 3 hrs.); I, II, III.  
*Consent required.* Permits a student to do advanced work as a continuation of an earlier experience or to work in an area of special interest. Topic for investigation must be selected and approved by advisor prior to registration.

AGR 480. Equine Breeding and Reproduction.  
(1-4-3); II.  
A thorough study of the anatomy and physiology of reproduction in the stallion and the mare with practical emphasis on teasing, breeding, and foaling techniques, semen collection, insemination, and evaluation, along with daily record keeping.

(3-0-3); on demand.  
Objectives with methods, equipment and management of the shop; organization of facilities for high school and vocational technical programs.

AGR 486. Planning Programs in Vocational Agriculture.  
(3-0-3); on demand.  
Organization and analysis of the program of vocational agriculture. Departmental program of activities, summer programs, advisory committees, and Future Farmers of America activities.

AGR 492. Supervision in Agriculture.  
(3-0-3); on demand.  
The principles and techniques needed in individual group supervision of vocational agricultural programs.

AGR 499C. Senior Seminar in Agriculture.  
(3-0-3); II.  
*Restriction:* senior status in an agriculture major or area of concentration. Students may conduct research projects or utilize literature surveys leading to written and oral reports in their area of interest in agriculture. Guest lecturers and faculty will present the most current information in agriculture. This course satisfies the integrative component for general education.

**APS - Appalachian Studies Courses**

**APS 201. Introduction to Appalachia.**  
(3-0-3); I.  
*Prerequisite:* FYS 101. A multidisciplinary introduction to the Appalachian region's natural environment, history, culture and sociopolitical structures within local, national, and global contexts. Particular emphasis will be given to contemporary issues and community building. *This interdisciplinary course satisfies the SBS II requirement for general education.*

**ART - Art & Design Courses**

**ART 100. 2D Design & Color Foundations.**  
(2-2-3); I, II.  
An introduction to fundamental elements and principles of two-dimensional design as well as artistic and scientific principles of color. The course covers, in a direct way, "why" an artist puts "what" "where." This course addresses design considerations such as: space and depth, scale, emphasis, balance, repetition, variation, symmetry, asymmetry, pattern and other elements of image form. These ideas are considered alongside color by examining how color affects these structures in an image. A variety of media is experimented with including paint, ink, pencil and paper, collage, digital media and others. This course is required for, but not limited to, art majors.

**ART 101. Two-Dimensional Foundation.**  
(2-2-3); I, II.  
An introduction to fundamental elements and principles of two-dimensional design. This course addresses the arrangement of formal elements within the picture plane. A variety of media are used including paint, ink, pencil and paper.

**ART 102. 3D Foundation.**  
(2-2-3); I, II.  
An introduction to three-dimensional concepts of form, space, surface and structure. Principles are taught employing a variety of methods, techniques and materials, such as cardboard, modeling clay, paper and wire.

**ART 103. Color Foundation.**  
(2-2-3); I, II.  
An introduction to the fundamentals of artistic and scientific principles of color. This course addresses elements of color and relationships between colors. The primary medium used will be acrylic paint.

**ART 109. Digital Foundations.**  
(2-2-3); I, II.  
An introduction to creative problem-solving techniques using digital tools. The course will cover how contemporary software and digital devices create new opportunities for creative approaches in two-dimensional media such as photography, drawing, design and animation. This course will balance design and art-based brainstorming and problem-solving approaches. This course is required for, but not limited to, art majors.

**ART 112. Drawing Foundations.**  
(2-2-3); I, II, III.  
This course is an introduction to the components of drawing: how
line, texture, and mark making can create depth, form, and space. Emphasis is placed on developing strong visual observation skills and technical competence in using drawing tools to develop representational space. A variety of media are used including charcoal, ink, pastel, and pencil. The course is required for, but not limited to, art majors.

ART 121. School Art I.  
(2-2-3); I, II, III.  
Introduction to art and to the teaching of art in the lower (1-3) elementary grades. Field experience required.

ART 160. Understanding the Visual Arts.  
(3-0-3); I, II, III.  
An examination of visual art from various cultures. It includes a study of materials, techniques, subjects, styles, issues, functions, and meanings related to visual art from many different cultures and periods around the globe. This course satisfies the HUM I requirement for general education.

ART 200. Introduction to Arts Administration.  
(3-0-3); II.  
Introduction to arts administration theory and practice; nonprofit management; marketing and public relations; volunteer and board relationships; fundraising and development; advocacy; community relations; arts education; special events coordination; and other relevant topics.

ART 205. Graphic Design I.  
(2-2-3); I, II.  
Prerequisites: ART 100, ART 109, and ART 112. Introduction to lettering principles and their application. Rough and comprehensive layout in black and white and color, with emphasis on design.

ART 214. Painting Techniques I.  
(2-2-3).  
Prerequisite: ART 103. Introduction to oil painting, materials and methods, arrangement of the palette; and the use of a variety of different subjects.

ART 221. School Art II.  
(2-2-3); II.  
Philosophy and methods of teaching art to children in the elementary grades; a study of materials, media, and tools. Field experience required.

ART 245. Ceramics I.  
(2-2-3); I, II, III.  
Introduction to ceramic forms in hand building, wheel-throwing, glazing, and decorative techniques.

ART 263. World Arts.  
(3-0-3); I, II.  
Prerequisite: FYS 101. A multidisciplinary introduction to world aesthetic traditions within cultural and historical contexts. This course satisfies the HUM I requirement for general education.

ART 264. Art History II.  
(3-0-3); I, II.  
An examination of ancient Greek and Roman, and Medieval art. It includes a study of materials, techniques, subjects, styles, issues, functions and meanings. Equates with IST 264.

ART 265. Art History III.  
(3-0-3); I, II.  
An examination of art from the Renaissance to the present. It includes a study of materials, techniques, subjects, styles, issues, functions, and meanings. Equates with IST 265.

ART 294. Sculpture I.  
(2-2-3); I, II.  
Prerequisite: ART 102. Creative experiences in the techniques, media, and tools of sculpture, work in stone, wood, metal, clay, and plaster.

ART 300. Elementary Materials and Methods.  
(2-2-3); II.  
Prerequisite: admission to TEP. Background and philosophy of elementary art in education. Field experience required.

ART 301. Field Experience in Art Education.  
(1-2-3); I.  
Prerequisite: admission to TEP. Clinical and field experiences required in the P-12 setting. Two full days weekly of field experiences in public schools in nearby communities.

ART 302. Typography.  
(2-2-3); I.  
Prerequisites: ART 109 and 205. An introduction to typography as a foundation for visual communication, with an emphasis on basic concepts of typography-type usage, type anatomy, type classification, basic terminology, tools and materials of the trade, and graphic design. This course is computer based, Macintosh platform.

ART 304. Drawing II.  
(2-2-3); I, II.  
Prerequisite: ART 112. A continuation of ART 112.

ART 305. Graphic Design II.  
(2-2-3); I, II.  
Prerequisites: ART 109 and 205. A study of three-dimensional design with emphasis on product and package design.

ART 306. Graphic Design for the Web  
(2-2-3); II.  
Prerequisites: ART 109 and 305. Application of the principles of graphic design to Web publishing. Emphasis on creative Web site design solutions through image preparation, typography and color design for individual and corporate clinics.

(2-2-3); I.  
Use of computers to generate and manipulate images.

ART 310. Puppetmaking.  
(2-2-3); I, II, III.  
The historical and contemporary significance of puppetry including the techniques and methods of construction and production.

ART 314. Painting Techniques II.  
(2-2-3); I, II, III.  
Painting from still life and landscape with emphasis on creative interpretation and expression.
ART 316. Watercolor I
(2-2-3); on demand.
Introduction to watercolor media and methods and to the use of various subjects.

ART 320. Survey of Graphic Design.
(3-0-3); on demand.
An exploration of the origins and evolution of graphics and graphic design from ancient civilization to present. Movements, styles and new developments shaped by technology will be investigated, as well as graphic designs and designers that influenced the ongoing evolution of the discipline.

(2-2-3); I.
Prerequisite: admission to TEP. Presentation of the background, philosophy, and techniques for the teaching of art in the secondary school. Field experience is required.

ART 345. Ceramics II.
(2-2-3); I, II, III.
Prerequisite: ART 245. Individual work in wheel-throwing, handbuilding, operation of kilns, and basic experiments in glazing.

ART 351. Intaglio Printmaking.
(2-2-3); I, II.
Prerequisite: ART 100. Creative experiments in intaglio printmaking on stone. Techniques include line etching, aquatint, soft ground, dry point, and monotype on zinc and copper.

ART 352. Lithographic Printmaking.
(2-2-3); I, II.
Prerequisite: ART 100. Creative experiments in the techniques of lithographic printmaking on stone. Processes include crayon, rubbing ink, liquid tusche, acid tint, and transfer.

ART 361. Ancient Art.
(3-0-3); on demand.
The history of Western painting, sculpture, and architecture from prehistoric times until the beginning of the Christian era.

(3-0-3); on demand.
The history of European painting, sculpture, and architecture from the beginning of the Christian era until c. 1300.

ART 363. Renaissance Art.
(3-0-3); on demand.
The history of European painting, sculpture, and architecture from c. 1300 until c. 1525.

ART 364. Mannerist and Baroque Art.
(3-0-3); on demand.
The history of European painting, sculpture, and architecture from c. 1525 until c. 1750.

ART 373. Basic Black and White Photography.
(2-2-3); I, II.
Practical introduction to basic camera and darkroom techniques of black and white photography. Areas covered include camera operation, film exposure and development, enlarging and print presentation.

ART 394. Sculpture II.
(2-2-3); I, II.
Prerequisite: ART 294. Studio problems involving the manipulation of various sculpture media.

ART 399. Selected Topics.
(3-0-3); on demand.
Specialized offerings in art for undergraduate students. The purpose of these special courses is to supplement regular course offerings in art.

ART 400. Internship.
(1 to 12 hrs.); I, II, III on demand.
Prerequisite: at least junior standing, completed application form, and consent of instructor. Experience in a working situation, allowing the student access to instruction and practical experiences not normally available in the Art Department curriculum.

ART 404. Drawing III.
(2-2-3); I, II.
Prerequisite: ART 304. A serious search into the expressive possibilities of the figure; anatomical investigation of parts, variety of media and techniques leading to individual interpretation.

ART 405. Graphic Design III.
(2-2-3); I, II.
Prerequisite: ART 305. Introduction to the use of graphics as a means of visual communication with emphasis on design concepts. Studio assignments on problems related to the community, society, industry, and commerce.

ART 406. Graphic Design IV.
(2-2-3); I, II.
Prerequisite: ART 405. Advanced work in advertising design with emphasis placed on the commercial application of design principles as they relate to the organization of copy and illustration for use by media.

ART 407. Commercial Illustration I.
(2-2-3); on demand.
Prerequisites: ART 204 and 205. Two- and three-dimensional forms and the various techniques for rendering them for use in commercial design. Emphasis is placed on realistic drawing and presentation of objects.

ART 408. Commercial Illustration II.
(3 to 6 hrs.); I, II.
Prerequisite: ART 407. The continuation of studies in the area of commercial illustration. A more comprehensive study of different media and illustration techniques. May be repeated for credit.

ART 409. Airbrush.
(2-2-3); on demand.
Prerequisites: ART 205 and 214. An introduction to use of the airbrush and its application to design concepts including shape, line, value, texture and composition. A variety of airbrush related materials are used. Techniques, skill and perceptual development are emphasized.

ART 410. Computer Animation.
(2-2-3); I, II.
Prerequisites: ART 109 and 309, or consent of department. The course will give students intensive instruction on the Macintosh
computer system in the use and application of 3D modeling and 3D animation programs in the visual art.

ART 411A. Drawing.
(2-2-3); I, II.
Prerequisite: ART 404. Advanced studio in figure drawing. Further exploration of figure drawing concepts and media with emphasis on creative interpretation and expression.

ART 411B. Drawing.
(2-2-3); I, II.
Prerequisite: ART 404. Advanced studio in figure drawing. Further exploration of figure drawing concepts and media with emphasis on creative interpretation and expression.

ART 414. Painting Techniques III.
(2-2-3); I, II.
Further exploration of different mediums and direction toward an individual approach. Painting from a variety of subjects; technical investigation and creative interpretation emphasized.

ART 415. Painting IV.
(2-2-3); I, II.
Experiences leading toward individual achievements in styles and techniques.

ART 430. Private Applied Art Education Studies.
(1-6 hours); I, II, III, on demand.
Prerequisite: must have completed at least nine credit hours in art education, have at least junior standing, complete an application form, and obtain consent of the instructor. The student will research a selected topic, engage in a related field experience and apply the research to the experience (theory to practice). Subject areas include pedagogy and curricular strategies such as service learning and community engagement, exceptional students in the P-12 setting, visual culture and media literacy, after school art programs, social and behavioral issues, and performing objects as a mediating teaching tool.

(1-6 hours); I, II, III, on demand.
Prerequisite: must have completed at least two 200-level art history courses and one 300-level or above art history course, have at least junior standing, complete an application form, and obtain consent of the instructor. An investigation of theoretical, conceptual, formal, sociopolitical, and/or economic concerns related to the making of art within cultural and historical context. This study will result in a comprehensive body of work (minimally a research paper, but optionally also artwork, and/or service-learning project).

ART 432. Private Applied 2-D Studies.
(1-6 hours); I, II, III, on demand.
Prerequisite: must have completed at least nine credit hours in the media, have at least junior standing, complete an application form, and obtain consent of the instructor. A thorough investigation of the techniques, materials, formal and conceptual concerns involved in creating 2-dimensional artwork. Special emphasis on experimentation and the development of a body of work.

ART 433. Private Applied 3-D Studies.
(1-6 hours); I, II, III, on demand.
Prerequisite: must have completed at least nine credit hours in the media, have at least junior standing, complete an application form, and obtain consent of the instructor. A thorough investigation of the techniques, tools, formal and conceptual concerns involved in creating three-dimensional artwork. Special emphasis on form and surface experimentation and development.

ART 434. Private Applied Digital Studies.
(1-6 hours); I, II, III on demand.
Prerequisite: Students must have completed at least 9 credit hours in the media, have at least junior standing, complete an application form, and obtain consent of the instructor. A thorough investigation of the techniques, software, formal and conceptual concerns involved in creating design and art with digital media. Special emphasis on experimentation and the development of a body of work.

ART 445. Ceramics III.
(2-2-3); I, II.
Prerequisite: ART 345. An in-depth study of more advanced forms, surface treatment theory of kiln firing and glaze calculation.

ART 446. Ceramics IV.
(2-2-3); I, II.
Advanced study of contemporary ceramic form and surface resolution. Continued practical experience with kiln operation and glaze calculation.

ART 451. Intaglio Printmaking Studio.
(2-2-3); I, II.
Prerequisite: ART 351. Advanced studio in intaglio printmaking. Techniques include engraving, mezzotint, color intaglio, photoetching and color monotype. May be repeated for credit.

ART 452. Lithographic Printmaking Studio.
(2-2-3); I, II.
Prerequisite: ART 352. Advanced studio in lithographic printmaking. Techniques include color lithography, reversal, chine colle, and multi-plate registration. May be repeated for credit.

ART 461. 18th and 19th Century European and U.S. Art.
(3-0-3); on demand.
The history of European and American art painting, sculpture, and architecture from c. 1750 until c. 1900.

ART 462. 20th Century Art.
(3-0-3); on demand.
The painting, sculpture, and architecture of the 20th century.

ART 463. Art of the United States.
(3-0-3); on demand.
A survey of the social, political, and cultural movements which affected the course of American artistic development.

(3-0-3); on demand.
A survey of the painting, sculpture, and architecture of Spain, Portugal, and Latin America.

ART 467. Native American Art.
(3-0-3); on demand.
A survey of the visual arts of the indigenous tribes of North America from the beginning of their recorded history through the present.

**ART 468. Appalachian Arts.**
(3-0-3); on demand.
This course will provide a survey of the arts of the Appalachian region from precolonial times to the present.

**ART 473. 35mm Photography.**
(2-2-3); I, II.
*Prerequisite: ART 373. Advanced small format shooting and darkroom techniques exploring various subjects and styles.*

**ART 474. Photo Studio.**
(2-2-3); I, II.
*Prerequisite: ART 473. Small or large format individual projects requiring in-depth treatment of a particular subject, concept or style.*

**ART 475. Large Format Photography.**
(2-2-3); I, II.
*Prerequisite: ART 473. Large format camera operation with various subjects and styles and printing of large format negatives.*

**ART 481. German Art of the 20th Century.**
(3-0-3); on demand.
This course will examine the visual expression of German, Austrian, and Swiss artists of the 20th century, including Die Brucke, Der Blaue Reiter, Dada, Neue Sachlichkeit, Surrealism, Bauhaus, art of National Socialism, and post war developments in the art of both West and East Germany. Particular emphasis will be placed on art and artists in relationship to political and social events of the time, especially the two World Wars, the rise of National Socialism, and the Cold War. Equates with IST 481.

**ART 482. Contemporary World Art.**
(3-0-3); on demand.
This course will provide a worldwide survey of contemporary visual arts in historical context and will explore current issues in contemporary art. Equates with IST 482.

**ART 494. Sculpture III.**
(2-2-3); I, II.
*Prerequisites: ART 294 and 394. Advanced problems in sculpture involving a combination of materials and their uniqueness as media.*

**ART 499C. Visual Art Capstone.**
(2-2-3); I, II.
*Requirement: junior or senior standing and permission of department chair. An integrative course stressing oral and written discourse on the visual arts and preparation of students for professional goals. This course satisfies the integrative component for general education.*

**ASTR - Astronomy Courses**

**ASTR 105. Your Cosmic Context.**
(3-0-3); I, II.
An introduction to Cosmology, the study of the nature and principles of the universe, presented as a framework to see ourselves within the context of cosmic history. Clues about the Cosmos, the fabric of space-time, the Big Bang theory and the expanding universe, the story of structure, and the emergence of complex life. *This course satisfies the NSC II requirement for general education.*

**ASTR 112. Introductory Astronomy.**
(3-0-3); I, II.
An introduction to the study of astronomical phenomena: cycles of the sky, the origin of modern astronomy, solar system basics, celestial mechanics, formation and evolution of stars, neutron stars and black holes, galaxies, structure of the universe. This course includes night-sky telescopic observations of the Moon, planets, stars and star clusters, nebulae, and galaxies. *This course satisfies the NSC II requirement for general education.*

**ASTR 125. Astronomical and Physics Methods to Explore the Universe.**
(3-0-3); I.
*Prerequisites: Math 152 or 141, or minimum Math ACT subscore of 22. An introduction to the study of astronomical phenomena: motions of the sky, planetary systems, stars, structure and scale in the universe. Emphasis on physical and astronomical methods: Newtonian physics, celestial mechanics, emission and detection of electromagnetic radiation, space-based observatories, spectroscopy, interferometry, multi-wavelength investigations, and introduction to computational methods. This course includes night sky observation sessions.*

**ASTR 130. Stars, Galaxies and Cosmology**
(3-0-3); II.
*Prerequisites: ASTR 125 and MATH 174. A continuation of the study started in ASTR 125 of astronomical phenomena, instrumentation and methods used in astronomy, the physical laws that govern the universe, and basic mathematical and computational methods that illustrate how these investigations may be carried out. This course focuses on stellar and galactic structure, evolution, and interaction: the Sun as a star, solar astrophysics, stars and stellar evolution, stellar endpoints, structure, evolution, and interaction of galaxies, and cosmology (structure and evolution of the universe). This course includes night sky observation sessions. An emphasis is placed on describing "how we know what we know" about each of these objects as a way to illustrate how scientists work and how modern science is conducted.*

**ASTR 299. Special Topics in Astronomy.**
(3-0-3); on demand.
Investigation of specific topics in astronomy. This course may be repeated in additional subject areas.

**ASTR 311. Astrophysics I: Stars and Stellar Evolution.**
(3-0-3); I.
*Prerequisites: ASTR 130, MATH 175, and PHYS 232. A study of the properties, formation, structure, and evolution of stars with an emphasis on the physical principles underlying the observed phenomena. Topics include the observed properties of stars, the birth, evolution, and death of stars; and stellar remnants such as pulsars, black holes, and white dwarfs.*

**ASTR 312. Astrophysics II: Galaxies & Cosmology.**
(3-0-3); II.
*Prerequisite: ASTR 311. This course is an in-depth study of the properties, formation, structure, and evolution of galaxies and of*
principles and modern theories of cosmology. The course emphasizes the application of physical laws and principles in the studies of galaxies. Astronomy is an observational, as opposed to an experimental, science. We have knowledge of the galaxies only by observing the radiation these objects emit. We will begin our study with the properties of galaxies (beginning with the Milky Way) including determination of morphologies, distances, sizes, stellar components, (i.e. disks, nuclei, spiral arms, globular cluster haloes, X-Ray and Dark Matter haloes), rotation rates, systemic velocities, atomic hydrogen distribution and mass. The remainder of the course will be an examination of principles of modern cosmology including an investigation of the Hot Big Bang Model, cosmological parameters, Dark Matter and Dark Energy, the geometry of space-time and scenarios for the ultimate fate of the universe.

**ASTR 324. Radio Astronomy.**
(3-0-3); on demand.
*Prerequisites: ASTR 125 and PHYS 232.* A study of astrophysically interesting phenomena utilizing the techniques of the science of radio astronomy; topics include galactic structure, radio galaxies, cosmic jets and black holes, interstellar molecules and instrumentation in radio astronomy, with a major emphasis in the methods of research in experimental astrophysics. Equates with SSE 324/PHYS 324.

**ASTR 431. Space Plasma Physics.**
(3-0-3); on demand.
*Prerequisite: PHYS 232. Corequisite: MATH 276 or 363.* An introduction to plasma physics and its applications to space and astrophysical systems, with an emphasis on the Earth’s environment in space. Topics will include the motion of charged particles in electromagnetic fields, the description of plasmas in the framework of one- and two-fluid approach, and its description in the framework of kinetic theory. Plasma equilibria, waves, and instabilities will also be discussed. Equates with SSE 431 and PHYS 431.

**ASTR 460. High Energy Astrophysics.**
(3-0-3); II; odd years.
*Prerequisites: PHYS 232 and MATH 276.* Introduction to physical processes associated with high energy astrophysics, including fundamentals of radiative transfer, basic theory of radiation fields, radiation from moving charges, bremsstrahlung, synchrotron radiation, Compton scattering, structure of both atoms and molecules as well as radiative transitions.

**ASTR 498. Senior Research.**
(1-0-1); I, II.
*Prerequisites: At least two of the following courses: ASTR 311, ASTR 312, ASTR 324 or ASTR 460. Corequisite: ASTR 311 or ASTR 324.* Senior-level problems course and research project in astrophysics with emphasis on data collection or analysis, use of scientific instrumentation, and/or computational methods in astrophysics.

**ASTR 499C. Senior Thesis I.**
(2-0-2); I, II.
*Prerequisites: Senior standing or petition required and at least two of the following: ASTR 311, ASTR 312, ASTR 324, and ASTR 460. Corequisite: ASTR 311 or ASTR 324.* The purpose of this course and its companion courses, ASTR 499D and ASTR 498, is to give students pursuing the astrophysics concentration of the physics major the opportunity to conduct formal research in astrophysics for credit. This research experience is crucial for any student interested in pursuing graduate studies in physics and astrophysics, and ultimately seeking a position as a research scientist. Research opportunities are available using either the 21-Meter Space Tracking Antenna located on the campus of Morehead State University to pursue a project related to radio astronomy or using Linux boxes located in the Stellar Necrology Laboratory to pursue a project related to X-ray astronomy.

**ASTR 499D. Senior Thesis II.**
(1-0-1); I, II.
*Prerequisites: ASTR 499C.* Senior-level problems course and research project in astrophysics. Continuation of ASTR 499C.

**BIOL - Biology Courses**

**BIOL 105. Biology For Your Life.**
(3-0-3); I, II.
*An introduction to biological chemistry, cell structure and function, ecology, evolution, organismal diversity, reproduction, and genetics. Not acceptable for biology majors or minors. This course satisfies the NSC I requirement for general education.*

**BIOL 110. Inquiry Biology for Teachers.**
(2-2-3); I, II.
*An introduction to the study of living things, cell structure and function, photosynthesis, respiration, reproduction, growth, heredity, evolution and ecology. Not acceptable for biology majors, minors, or areas of concentration.*

**BIOL 150. Introduction to Plant Science.**
(2-2-3); I.
*Structure, growth, reproduction and ecology of plants. Emphasis on cultivated plants and applications. Not acceptable for biology majors, minors, and areas of concentration.*

**BIOL 155. Introduction to Environmental Science.**
(3-0-3); I, II.
*Human ecology with special emphasis on the interactions between humans, required resources (physical, chemical, geological and biological), and their regional and global environments. Information is presented from an analytical and interdisciplinary perspective.*

**BIOL 160. Introduction to Biological Principles.**
(3-0-3); I, II.
*A course in biology for students to gain competency for BIOL 171. Emphasis is placed on establishing a foundation in molecular, cellular, and biochemical aspects of biology. Not accepted as credit toward the department’s majors, minors, or areas of concentration.*

**BIOL 171. Principles of Biology.**
(3-2-4); I, II.
*Prerequisite: composite ACT of 20 or above, or minimum grade of "C" in BIOL 105 or BIOL 160. General biological principles; emphasis on cell function, energetics, homeostasis, genetics, evolution, and ecology.*

**BIOL 199. Selected Workshop Topics.**
(1 to 4 hrs.); on demand.
Biology.

Prerequisites: eight hours from BIOL. Consent required. Workshops in various biological and environmental subjects presented periodically, based on need. Usually hands-on, experimental, and/or innovative, these workshops supplement various programs in the biological and environmental sciences or other disciplines. Individual credit toward degree programs must be approved by the department chair.

Biol 210. General Zoology. (2-4-4); I, II.
Prerequisite: BIOL 171. A survey of animals from protozoa to mammals with emphasis on phylogeny, evolution, comparative morphology, and physiology.

Biol 213. Introduction to Veterinary Microbiology. (2-4-4); I, II.
Prerequisite: CHEM 101. Study of bacterial and mycotic agents pathogenic to humans and animals. The collection, isolation, cultivation and identification of pathogenic microorganisms from animals is stressed. Virology, anti-microbial susceptibility tests, serological methods and quality control introduced. Not acceptable for biology majors or minors.

Biol 215. General Botany. (2-4-4); I, II.
Prerequisite: BIOL 171. Structure and physiology of vegetative and reproductive plant organs; introduction to plant genetics and plant kingdom in terms of structure, ecology and evolution.

Biol 217. Elementary Medical Microbiology. (3-2-4); I, II, III.
Prerequisites: BIOL 235 or CHEM 101 and BIOL 160. An elementary microbiology course for students interested in understanding the characteristics and activities of microorganisms and their relationship to health and disease. Not acceptable as credit for biology majors or minors.

Biol 234. Human Anatomy & Physiology I. (3-0-3); I, II, III.
Prerequisite: composite ACT score of 19 or above, or BIOL 105, BIOL 160, or BIOL 171. This course is a study of human tissues and organs systems (integumentary, nervous, skeletal, and muscular) with focus on the interrelationships of form and function. Homeostatic regulatory mechanisms will be continually emphasized. Not acceptable as credit for Biology Area Nonteaching Option or Environmental Option or minor in biology.

Biol 235. Human Anatomy & Physiology II. (3-0-3); I, II, III.
Prerequisite: BIOL 234. This course is a study of human organ systems (endocrine, reproductive, cardiovascular, lymphatic, digestive, respiratory, and urinary) with focus on the interrelationships of form and function. Not acceptable as credit for Biology Area Nonteaching Option or Environmental Option or minor in biology. Required for the Biology Area Teaching Option.

Biol 233. Laboratory for Human Physiology. (0-2-1); on demand.
Consent required. Prerequisite: BIOL 235 or equivalent (may be taken concurrently). Fundamental physiological principles with an emphasis on laboratory technique, equipment usage, and clinical applications. Not acceptable as credit for biology majors and minors (nonteaching).

Biol 301. Fundamentals of Biochemistry. (3-2-4); I, II.
Prerequisite: CHEM 112 or 201. Chemistry of simple and complex biomolecules such as amino acids, proteins, carbohydrates, lipids and nucleic acids. Biosynthesis and metabolic cycles; gene composition (DNA, RNA, etc.). Not accepted as credit for chemistry minors. Equates with CHEM 301.

Biol 303. Evolution, Creationism, and the Nature of Science. (1-0-1); on demand.
Through the use of primary readings, the arguments against evolutionary theory by antievolution creationists are examined and refuted within the scientific paradigm, as well as philosophical and theological contexts. The goal of this course, primarily designed for nonbiology majors, is to clarify misconceptions about evolutionary biology and the process of scientific investigation. Not acceptable for fulfilling requirements for the biology area of concentration or biology major.

Biol 304. Genetics. (2-2-3); I, II.
Prerequisite: BIOL 171. Mendelian inheritance, chemical nature of DNA and chromosomes, regulation of gene expression, experimental techniques in genetics, human genetic disorders and population genetics.

Biol 313. Economic Botany. (3-0-3); on demand.
Wood products, plant fibers, latex products, pectins, gums, resin tannins, dyes, essential oils, medicinals, insecticides, tobacco, oils, fats, waxes, food and beverage plants. Three lecture-discussion-demonstration hours per week.

Biol 317. Principles of Microbiology. (2-4-4); I, II.
Prerequisites: BIOL 171 and CHEM 101 or CHEM 111. Fundamental and applied aspects of microbiology. Prokaryotic cell structure and morphology, diversity, metabolism, and genetics emphasized; virology and immunology introduced. Microbiological techniques, scientific inquiry, bacterial identifications, and recombinant DNA technology stressed in the laboratory.

Biol 318. Local Flora. (1-4-3); even years.
Prerequisite: BIOL 215. Identification and classification of plants native to the area. Collection and herbarium techniques.

Biol 334. Entomology. (2-2-3); II, odd years.
Prerequisite: BIOL 210. A general introduction to insect morphology, physiology, behavior, ecology, evolution, and diversity. The roles of insects as pests, as vectors of disease, and in forensics are also covered. Identification of common orders and families and general morphological structures are covered in lab. Field work is expected.

Biol 336. Pathophysiology. (4-0-4); II, III.
Prerequisites: BIOL 235, and CHEM 101 or CHEM 111. Emphasis
on physiological mechanisms in regard to disease, pharmacological actions, and providing a bridge between basic science and the clinic. BIOL 217 or BIOL 317 is recommended.

BIOL 337. Comparative Anatomy.  
(2-2-3); II.  
Prerequisite: BIOL 210. Vertebrate morphology, especially from an evolutionary perspective. Functional aspects and evolutionary trends among the vertebrate classes are emphasized.

BIOL 338. Developmental Biology.  
(2-2-3); I.  
Prerequisite: BIOL 210. Vertebrate development from gamete formation through the fetal stage; emphasis on comparative structural development.

BIOL 350. Heredity and Society.  
(3-0-3); on demand.  
Prerequisite: three hours from BIOL. Evolutionary processes and intricacies of genetic transmission. Evolution in human thought, experience and affairs.

BIOL 351. Plant Natural History.  
(3-0-3); I, odd years.  
Prerequisite: BIOL 105 or BIOL 110. A survey of major taxonomic groups; emphasis on the natural history of local plants.

BIOL 352. Animal Natural History.  
(3-0-3); I, even years.  
Prerequisite: BIOL 105 or BIOL 110. The main objectives of this course are to understand the basic structure, ecology and evolution, life history, behavior, and diversity of animal groups.

BIOL 356. Environmental Biology.  
(3-0-3); II.  
Prerequisites: BIOL 210 and BIOL 215. Basic ecological principles, population and community ecology as they apply to current environmental problems. BIOL 357 is a companion course.

(1-4-3); I.  
Prerequisites: BIOL 210 and BIOL 215. Field and laboratory methods used by environmental professionals. Techniques of terrestrial and aquatic habitat analysis and aquatic toxicology. BIOL 356 is a companion course.

(3-0-3); on demand.  
Prerequisite: Successful completion of the General Education requirements in Life Sciences (NSCI). In-depth survey of the interaction of human populations with their surrounding environment. Natural resource and waste management practices with a focus on sustainability will be studied using examples from local, regional, national and global levels. "Going Green" will be investigated from scientific, practical, social and economic perspectives. Not acceptable as credit for biology areas or minors.

(2-2-3); I, II.  
Prerequisites: BIOL 304, and CHEM 201 or CHEM 326. Integration of biological, chemical, and physical aspects of the cell. Emphasis on molecular processes.

BIOL 399. Selected Workshop Topics.  
(1 to 4 hrs.); on demand.  
Prerequisites: eight hours from BIOL. Consent required. Workshops in various biological and environmental subjects presented periodically, based on need. Usually hands-on, experimental, and/or innovative, these workshops supplement various programs in the biological and environmental sciences or other disciplines. Individual credit toward degree programs must be approved by the department chair.

(2-2-3); I.  
Restriction: admission to TEP required. Prerequisites: 20 hours from BIOL. Corequisite: BIOL 403. Methods course for students who desire to become teachers of middle school science and secondary school biology, physical science or mathematics. The course provides integrated and content specific clinical experiences designed to prepare the student for student teaching and their subsequent role as a classroom teacher. Equates with MATH 402 and SCI 402.

BIOL 403. Integrated Biology, Mathematics, and Physical Science Field Experiences in Teaching  
(1-4-3); I.  
Restriction: admission to TEP required. Prerequisites: 20 hours from BIOL. Corequisite: BIOL 402. Course provides structured field experiences for students who desire to become teachers of secondary school biology, mathematics, or physical science. This course provides guided field experiences to acclimate the student into the culture of teaching. Equates with MATH 403 and SCI 403.

BIOL 407. Invertebrate Zoology.  
(1-4-3); on demand.  
Prerequisite: BIOL 210. Emphasis is placed on the evolutionary history, comparative morphology, key adaptations, and diversity of the major invertebrate phyla. Field trips optional.

BIOL 409. Limnology.  
(2-2-3); II.  
Prerequisites: 12 hours from BIOL and eight hours from CHEM. Ecology and biota of inland waters. Some all-day field trips required.

BIOL 421. Biology of Ferns.  
(1-4-3); I, odd years.  
Prerequisites: BIOL 215. Structure, reproductive biology, systematics, genetics, ecology, evolution, and natural history of ferns and fern-like plants. Field trips required.

BIOL 424. Immunology.  
(2-2-3); II, even years.  
Prerequisites: BIOL 317 and BIOL 380. Basic cellular and molecular mechanisms of the immune response and its regulation, including response manifestations. Modern laboratory techniques stressed, including monoclonal antibody production.

BIOL 425. Animal Physiology.  
(2-2-3); I.  
Prerequisites: BIOL 301 or CHEM 310, and BIOL 380. Comparison of fundamental physiological processes in representative vertebrate animals. Emphasis placed on comparative energetics and
physiological adaptations of organisms to their environment.

**BIOL 426. Plant Physiology.**  
(2-2-3); II.  
*Prerequisites: BIOL 215, BIOL 304 and BIOL 380.* The fundamentals of physiological functioning of angiosperms from the molecular to the organismal level. Topics include: diffusion, osmosis, cell wall and membrane structure, mineral nutrition, photosynthesis, respiration, photoperiodism, and other aspects of plant growth and development.

**BIOL 427. Pathogenic Microbiology.**  
(2-2-3); I, even years.  
*Prerequisite: BIOL 217 or BIOL 317.* Medically important microorganisms; bacteria and fungi emphasized. The isolation, cultivation, and identification of pathogenic microorganisms from clinical specimens are stressed. Antimicrobial susceptibility tests, serological methods, and quality control introduced.

**BIOL 428. Virology.**  
(3-0-3); I, odd years.  
*Prerequisite: BIOL 317.* Morphology and chemistry of the virus particle; symptoms; identification, and control of more common virus diseases of plants and animals; host-virus relationships; and research methods concerned with viruses.

**BIOL 429. Histology.**  
(2-2-3); I.  
*Prerequisites: BIOL 380, plus eight hours from BIOL.* The study of human tissues with emphasis on anatomical, physiological, and biochemical properties/relations.

**BIOL 431. Herpetology.**  
(1-4-3); II, odd years.  
*Prerequisite: BIOL 210.* The anatomy, physiology, taxonomy, ecology, distribution, behavior, natural history, and evolution of amphibians and reptiles. Emphasis on collection, identification, and classification of those herptiles found in eastern North America. Field trips required.

**BIOL 433. Ichthyology.**  
(1-4-3); I, even years.  
*Prerequisite: BIOL 210.* The anatomy, physiology, systematics, ecology, zoogeography, natural history, evolution and conservation of fishes. Emphasis on collection, identification, and classification of freshwater fishes native to eastern North America and marine fishes of the Atlantic and Gulf coasts. Field trips required.

**BIOL 437. Ornithology.**  
(1-4-3); II, even years.  
*Prerequisite: BIOL 210.* Anatomy, physiology, classification and identification of birds, as well as examination of bird behavior, life histories, ecology, and evolution. Field trips required.

**BIOL 438. Mammalogy.**  
(1-4-3); I, odd years.  
*Prerequisite: BIOL 210.* The taxonomy, distribution, behavior, ecology, evolution, and natural history of mammals, with emphasis on those inhabiting eastern North America. Field trips required.

**BIOL 439. Cooperative Education.**  
(1 to 4 hrs.); on demand.
BIOL 456. Plant Morphology.  
(2-2-3); on demand.  
Prerequisite: BIOL 215. Fossil and living nonvascular plants (except bacteria) and vascular plants; emphasis on ecology, morphology, and evolution.

(2-2-3); I, II.  
Prerequisites: 12 hours from BIOL plus eight hours from CHEM. Interrelations of organisms and environment. Some all day field trips required.

BIOL 476. Special Problems.  
(1 to 6 hrs.); I, II, III.  
Consent required. Independent topics and research in the biological and environmental sciences. Topic must be approved prior to registration by the department chair.

(3-0-3); on demand.  
Prerequisite: 12 hours from BIOL. An introduction to the principles of animal behavior with emphasis on oncological and evolutionary implications.

BIOL 480. History of Science.  
(3-0-3); on demand.  
Prerequisites: six hours from BIOL, CHEM, or PHYS. Development of scientific traditions, discoveries, and concepts from the time of ancient Egypt to the present.

BIOL 483. Selected Workshop Topics.  
(1 to 4 hrs.); on demand.  
Prerequisite: 12 hours of biology. Workshops in various biological and environmental subjects presented periodically, based on need. Usually hands-on, experimental, and/or innovative, these workshops supplement various programs in the biological and environmental sciences or other disciplines. Individual credit toward degree programs must be approved by the department chair.

BIOL 490. Biochemistry.  
(4-0-4); II.  
Prerequisite: BIOL 301 or CHEM 301. In-depth survey of the major control points in biochemical pathways with an emphasis on studies from the primary literature.

BIOL 493. Laboratory Techniques in Biochemistry.  
(0-4-2); on demand.  
Prerequisite: BIOL 301 or CHEM 301. Weekly laboratory sessions focusing on advanced techniques utilized in the study of biological molecules. Emphasis will be placed on methods in isolation and characterization of biological materials, density gradient ultracentrifugation, spectroscopic methods, electrophoretic techniques, chromatographic separation, radiosotopic labeling, and statistical analysis of experimental data.

BIOL 499C. Contemporary Environmental Issues.  
(3-0-3); II.  
Corequisite: BIOL 461. An in-depth examination of current environmental issues and problems with local, regional, national or international import. The historic context, current laws and applicable technology, ecological, social and ethical implications of the issues will be explored. This course satisfies the integrative component for general education for students with an area of concentration in environmental science.

BIOL 499D. Principles of Evolution.  
(3-0-3); I, II.  
Prerequisites: BIOL 304 and BIOL 317. Major principles of evolutionary biology are illustrated by using examples from molecular, cellular, and organismal biology, history of evolutionary theory, population genetics, natural selection, specialization, and macroevolutionary patterns. This course satisfies the integrative component for general education for students completing an area in biology.

BIS - Business Information Systems Courses

(3-0-3); on demand.  
One of the most popular uses of microcomputers is word processing—the creation of documents. This course provides an introduction to the fundamental concepts associated with digital documents creation and formatting, design, and layout of business related documents. The course covers a wide range of word processing features. Class assumes keyboarding proficiency.

BIS 216. Contemporary IT Applications.  
(3-0-3); on demand.  
Prerequisites: BIS 116 and CIS 101. This course provides an in-depth coverage of advanced document processing and management software, including desktop publishing and voice recognition. Principles of analysis, design, organization, and presentation of information will be discussed as they relate to developing appropriate business solutions. Emphasis will be placed on evaluating and selecting alternative solutions for a wide range of business, professional, and promotional needs.

(3-0-3); on demand.  
Prerequisite: CIS 101. Designed to provide the student with key concepts relating to information resource management and associated emerging technologies for creating, distributing, maintaining, and protecting data in organizational environments. In addition, students will discover and apply fundamental knowledge management principles used to maximize the utility of information resources in organizational environments.

BIS 290. End User Application Development.  
(3-0-3); on demand.  
Prerequisite: CIS 211. This course focuses on solving business problems using integrated software solutions and a VBA program. Case studies and problem activities in core business areas are used to address information systems solutions. The course serves as a required integrative capstone course for the AAB degree in Business Information Systems.

(3-0-3); I, II, III.  
Prerequisite: ENG 200. This course introduces upper-division students to current principles and theories of business communication that stress human relations, ethics, demographic diversity,
and global and cross-cultural communications. Attention will be given to planning, composing, evaluating, and analyzing business letters, short documents, memoranda, electronic messages, resumes, and informal reports. Emphasis is on techniques for achieving clarity, brevity, and effectiveness in written business communication.

**BIS 350. Computer Systems Support & Security.**
*(3-0-3); on demand.*
*Prerequisite: CIS 311.* This course introduces students to advanced concepts related to PC maintenance, troubleshooting and technical support. Other related topics on help-desk administration, security issues, operating systems, and A+ certification preparation will be discussed.

**BIS 421. Business and Technical Presentations.**
*(3-0-3); I, II, III.*
*Prerequisite: BIS 321.* Provides practical strategies for creating and presenting business and technical presentations supported by emerging desktop presentation software. This course will include researching, creating, and presenting business plans, financial audit and accounting reports, marketing and economic data analysis, as well as research and technical information. Negotiating and selling skills also will be an integral part of the course.

**BIS 425. Training and Development for Industry.**
*(3-0-3); on demand.*
*Prerequisites: BIS 421 and MNGT 301.* Study of the relevant theories, issues, trends, and methods in training and developing adult learners in work organizations; includes program design, needs and task analysis, delivery methods, working with consultants, and program evaluation. Equates with MNGT 425.

**BIS 440. Planning and Implementation of IT.**
*(3-0-3); on demand.*
*Prerequisites: CIS 211, 311, and junior/senior standing.* This course emphasizes the assessment, design, planning, and implementation of end-user information systems. The course consists of an overview of critical analysis of the role and importance of end-user computing in today’s organization. Emerging information technologies and associated behavioral issues will be investigated.

**BIS 499C. Methods of Teaching Business and Information Technology Education.**
*(3-0-3); I.*
Application and integration of field experiences, teaching and learning approaches to create objectives, lesson plans, skill building techniques; use of methods, materials, technology, teaching aides, testing, measurement, and grading for business and marketing education grades 5-12 certification. Field experience required. This course satisfies the integrative component for general education only in the Business and Information Technology Education degree programs.

**CHEM - Chemistry Courses**

**CHEM 101. Survey of Chemistry.**
*(3-2-4); I, II.*
*Prerequisite: MATH 093 with grade of "A" or "B" or MATH 131 with grade of "C" or higher or ACT Math score of 18 or above.* A survey of chemical topics that includes atoms, molecules, mixtures, chemical reactions, subatomic particles, light and matter, stoichiometry, heats of reaction, ions, acids, bases and pH. The topics are covered in combination with case studies such as ozone layer depletion and global warming. This course is intended for students in the applied sciences and is not recommended for natural science majors.

**CHEM 104. The Chemistry of Ordinary Things.**
*(3-0-3); II.*
An introduction to some of the fundamental qualitative ideas of chemistry and the application of these ideas to energy sources, pollution, foods, nutritional supplements, cosmetics, plastics and other modern materials.

**CHEM 111. Principles of Chemistry I.**
*(3-0-4); I, II.*
*Prerequisite: MATH 152 or ACT math score of 20 or higher.* An introduction to stoichiometry and chemical equations, electronic structure of atoms and molecules, periodic properties, gases, phases equilibria, and solutions, with laboratory. Equates with MNGT 425. Primarily for natural science and preprofessional students.

**CHEM 112. Principles of Chemistry II.**
*(3-0-4); I, II.*
*Prerequisite: MATH 152 or 174 with grade of "C" or better, or ACT math score of 22 or higher, and grade of "C" or better in CHEM 111.* Continuation of CHEM 111. An introduction to chemical equilibria, thermodynamics, and kinetics, electro-chemistry, and coordination compounds, with laboratory. The descriptive chemistry of selected groups of elements is introduced.

**CHEM 131. Environmental Chemistry I.**
*(3-0-3); II.*
*Prerequisite: grade of "C" or better in CHEM 111.* An overview of types of chemical reactions including organic reactions. This will be applied to studying the origin, nature, distribution and fate of a wide variety of chemical species in the environment. The laboratory portion of the course will illustrate the fundamentals of potentiometry, spectrophotometry, atomic absorption, atomic emission, and gas, liquid and ion chromatography methods used for environmental analyses.

**CHEM 199. Selected Topics.**
*(1 to 6 hrs.); on demand.*

**CHEM 201. Survey of Organic Chemistry.**
*(3-0-4); I, II.*
*Prerequisite: grade of "C" or better in CHEM 101.* A survey of chemical topics that includes precipitation and redox reactions, radioactivity, solar energy, organic functional groups, drug design and approval, polymers, carbohydrates, proteins and lipids. The topics are covered in combination with case studies such as the pollution of a lake, Chernobyl disaster and the Thalidomide problem. This course is intended for students in the applied sciences and is not recommended for natural science majors.

**CHEM 239. Cooperative Education.**
*(1 to 8 hrs.); I, II, III.*
*Prerequisite: consent of department chair.* Participation in supervised work experience in a professional environment.
CHEM 299. Selected Topics.
(1 to 6 hrs.); on demand.

CHEM 301. Fundamentals of Biochemistry.
(3-2-4); I, II.
Prerequisite: CHEM 112 or 201. Chemistry of simple and complex biomolecules such as amino acids, proteins, carbohydrates, lipids, and nucleic acids. Biosynthesis and metabolic cycles; gene composition (DNA, RNA, etc.). Not accepted as credit for chemistry minors. Equates with BIOL 301.

CHEM 326. Organic Chemistry I.
(3-2-4); I, II.
Prerequisite: grade of "C" or better in CHEM 112. Structure and nomenclature of organic molecules; introductions to interpretation of spectra reactions and reaction mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers, with laboratory.

CHEM 327. Organic Chemistry II.
(3-2-4); I, II.
Prerequisite: grade of "C" or better in CHEM 326. Interpretation of IR and NMR spectra; reactions and reaction mechanisms of aldehydes, ketones, carboxylic acids and derivatives, phenols, amines, and organometallics, with laboratory.

CHEM 328. Organic Chemistry III.
(2-4-4); on demand.
Prerequisite: grade of "C" or better in CHEM 327. Advanced topics in organic chemistry; orbital symmetry, heterocyclics and polycyclics, macromolecules, carbanion reactions, and an introduction to physical organic chemistry, with laboratory.

CHEM 332. Environmental Chemistry II.
(3-0-3); I.
Prerequisite: CHEM 327. An intensive study of the fate of environmental contaminants and their dispersion. Containment and remediation strategies will be discussed in detail, particularly their chemical principles.

CHEM 339. Cooperative Education.
(1 to 8 hrs.); I, II, III.
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

CHEM 340. Chemical Information.
(1-2-2); II.
Prerequisite: CHEM 326. Study and use of primary and secondary chemical literature sources, data, and reference sources in chemistry. An introduction to the Chemical Abstracts service, Biological Abstracts, Science Citation Index and the corresponding data bases. Personal data bases, data collection and manipulation, and related current software will also be discussed.

CHEM 351. Bioinorganic Chemistry.
(2-3-3); I.
Prerequisite: grade of "C" or better in CHEM 112. Structure of inorganic compounds. Electron transfer reactions, acid-base theories, kinetic and reaction mechanisms, and relationship of thermodynamics to structure and reactivity of inorganic compounds. Concepts will be taught using biological systems or model compounds for these systems as examples.

CHEM 360. Analytical Chemistry.
(2-3-3); I, II.
Prerequisites: grade of "C" or better in CHEM 112 plus two other science lab courses. Errors and small sample statistics, stoichiometry, equilibrium calculations, electrochemical potentials and compleximetric chemistry. Labs will include volumetric, pH, and various chromatographic and absorption spectrophotometric techniques. Stoichio and equilibria concepts will be pursued through lecture and applicators in the instrumental labs.

CHEM 399. Selected Topics.
(1 to 6 hrs.); on demand.

CHEM 429. Pharmaceutical Chemistry.
(3-0-3); on demand.
Prerequisites: "C" or better in CHEM 327 and "C" or better in CHEM/BIOL 301. Advanced topics in organic, physical, and computational chemistry of drug discovery, design, and kinetics. Drug-receptor interactions, enzyme inhibition/inactivation, drug deactivation/elimination. Prodrugs and drug delivery systems will also be discussed.

CHEM 439. Cooperative Education.
(1 to 8 hrs.); I, II, III.
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

CHEM 441. Physical Chemistry I.
(3-0-3); I.
Prerequisites: CHEM 326, MATH 175 and PHYS 201 or 231, with grades of "C" or better. Chemical thermodynamics and chemical kinetics.

CHEM 442. Physical Chemistry II.
(3-4-5); II.
Prerequisites: grade of "C" or better in CHEM 441 and MATH 275. Topics include quantum chemistry, spectroscopy, statistical mechanics, and transport properties.

(3-0-3); offered every third semester.
Prerequisite: grade of "C" or better in CHEM 351. CHEM 441 is recommended. Electronic structure and bonding in inorganic compounds. Thermodynamic and kinetic interpretation of selected inorganic and organometallic reactions.

CHEM 460. Analytical Chemistry II.
(2-6-5); offered every third semester.
Prerequisites: grade of "C" or better in CHEM 327 and 360. The theory and practice of infrared, visible, ultraviolet, X-ray and gamma ray, and electron spectroscopies in determinations. The use of chromatography, atomic spectroscopy, and electrochemistry in analytical chemistry. Some quantitative applications of mass and nuclear magnetic resonance spectroscopy are included.

CHEM 476. Special Problems.
(1 to 6 hrs.); I, II, III.
Prerequisite: consent of instructor. Topic to be approved prior to registration. (Maximum of three credit hours applicable toward major, minor, or area of concentration in chemistry.)

CHEM 499. Selected Topics.
(1 to 6 hrs.); on demand.
CHI - Chinese Courses

CHI 101. Elementary Chinese I.  
(3-0-3); I.  
An introduction to listening, speaking, reading, and writing Mandarin Chinese, with some attention to culture.

CHI 102. Elementary Chinese II.  
(3-0-3); II.  
Prerequisite: CHI 101. An introduction to listening, speaking, reading, and writing Mandarin Chinese, with some attention to culture.

CHI 199. Chinese Language and Culture.  
(3-0-3); on demand.  
An introduction to Chinese phonetics, basic vocabulary, and elementary grammar. Basic reading and conversation skills are emphasized.

CHI 201: Intermediate Chinese I.  
(3-0-3); I.  
Prerequisites: CHI 101 and 102. Continuing study of listening, speaking, reading, and writing Mandarin Chinese, with some attention to culture.

CHI 202: Intermediate Chinese II.  
(3-0-3); II.  
Prerequisites: CHI 101, CHI 102 and CHI 201. Continuing study of listening, speaking, reading, and writing Mandarin Chinese, with some attention to culture.

CHI 300-E. Contemporary Chinese Literature and Chinese Society.  
(3-0-3); on demand.  
An introduction to how contemporary Chinese writers have created works reflecting the new era of Chinese life. An emphasis on how recent Chinese literature both reflects Chinese history and how it confronts the problems of present-day Chinese society.

CIS - Computer Information Systems Courses

(3-0-3); I, II, III.  
Students will learn effective strategies for learning and applying microcomputer software including word processing, spreadsheet, presentation and database management. The course introduces concepts, terminology, and tools of the microcomputer software operating and application system environment. Introduction to the effective utilization of networking for communication, research, and information downloading is also incorporated in the course. Emphasis is on preparing the student to use computer technology effectively in education and work environments.

CIS 200. Problem Solving in IS.  
(2-2-3); I, II.  
Prerequisites: CIS 101. This course will prepare present problems, modeling and problem solving in areas across the information systems discipline, including: decision making, programming.

databases, visual design, information architecture and file management. Students will be introduced to elementary skills in programming, file management, website development, and database design.

(3-0-3); on demand.  
Prerequisite: CIS 200 or MATH 170. This course uses the Visual Basic programming language to introduce basic programming concepts and processes such as data types, variables, operators, control structures, and arrays. A steady progression of hands-on programming exercises is used to teach analytical and quantitative problem solving, methodical programming and design.

CIS 203. PC Productivity Tools.  
(3-0-3); on demand.  
Prerequisite: CIS 101. This course builds on the computer competencies the student learned in CIS 101. It develops proficiency with personal computer productivity tools such as spreadsheets, relational databases, presentation software, and Internet tools. Students also learn fundamentals of the personal computer operating system environment, file management, and problem solving. This course may not be used for credit in the CIS or BIS options.

CIS 205. Introduction to Programming C++.  
(3-0-3); on demand.  
Prerequisite: CIS 200 or CIS 170 or MATH 170. This course uses the C++ programming languages to introduce basic programming concepts and processes such as data types, variables, operators, control structures, and arrays. A steady progression of hands-on programming is used to teach analytical and quantitative problem solving, methodical programming and design.

CIS 211. Spreadsheet & Database Applications.  
(3-0-3); I, II.  
Prerequisite: CIS 101 or computer competency equivalent. This course prepares students to be proficient in problem solving through the application of spreadsheet and database tools. In addition, students gain experience with microcomputer hardware, operating systems, and file management.

CIS 214. Introduction to Programming-Java.  
(3-0-3); on demand.  
Prerequisite: CIS 200 or CS 170 or MATH 170. This course uses the Java programming language to introduce basic programming concepts and processes such as data types, variables, operators, control structures, and arrays. A steady progression of hands-on programming exercises teaches analytical and quantitative problem solving, methodical programming and design. Introductory level object-oriented programming, Java input/output process, exception handling, and graphical user interfaces are covered.

CIS 215. Introduction to Programming-COBOL.  
(3-0-3); on demand.  
Prerequisite: CIS 200. This course uses the COBOL programming language to introduce basic programming concepts and processes such as data types, variables, operators, control structures, and arrays. A steady progression of hands-on programming exercises is used to teach analytical and quantitative problem solving, methodical programming and design.
(3-0-3); on demand.  
Prerequisite: CIS 202 or CS 303 or consent of instructor. This course builds upon the skills and knowledge developed in CIS 202. Emphasis is placed upon development in a visual environment. Major topics include object oriented concepts, database linkages, graphics, and developing applications for the Internet. Students will use state-of-the-art development tools and design methods to implement business applications that run on a stand-alone PC, on a network, and on the Internet.

CIS 303. Data Structures.  
(3-0-3); on demand.  
Prerequisite: CIS 205. Key concepts of data definitions, such as lists, stacks, and queues. Recursion, graphs and trees, sorting and searching. Structured program design, elementary data structures and the study of algorithms as tools of program design. Equates with CS 303 and MATH 303.

CIS 305. Advanced Programming-C++.  
(3-0-3); on demand.  
Prerequisite: CIS 205 or CS 303 or consent of instructor. A continuation of CIS 205, with an emphasis on object-oriented methodologies, modular program design, reusable and extensible components, cross-platform compatibility, and stream manipulations. Numerous hands-on programming assignments are used to help the student build proficiency as a computer programmer.

CIS 311. Management Information Systems.  
(3-0-3); I, II, III.  
Prerequisites: CIS 101 or computer competency equivalent. This course provides an introduction to the fundamental concepts of information systems. Its focus is on preparing future business professionals and knowledgeable workers for the successful implementation and effective use of information in globally-networked organizations. The content emphasizes the strategic role of information systems in developing business solutions, integrating business processes, and transforming enterprises for e-commerce and mobile commerce.

CIS 314. Advanced Programming-Java.  
(3-0-3); on demand.  
Prerequisite: CIS 214 or CS 303 or consent of instructor. This course provides a hands-on introduction to the concepts and terminology of object-oriented programming in the Java language. Concepts covered include applets and servlets, packages and server-side processes, and dynamic Internet content generation.

CIS 315. Advanced Programming-COBOL.  
(3-0-3); on demand.  
Prerequisite: CIS 215 or CS 303, or consent of instructor. Advanced structured computer programming using COBOL. Tape and disk file structures and processing emphasized.

CIS 320. Web Technologies & Design.  
(3-0-3); II.  
Prerequisite: CIS 101. This course introduces the student to the Internet technologies, Web design concepts and information architecture using Web editor software. The course also provides an introduction to the hypertext markup language (HTML). Emphasis will be placed on the planning, design, implementation and evaluation of informational websites for organizations.

(3-0-3); on demand.  
Prerequisite: CIS 101. An overview of information systems security, with applications. The course emphasizes methods for the management of information security through the development of policies, procedures, audits, and logs. It also addresses threats, risks, and vulnerabilities, emerging technologies in areas like smart cards, digital signatures, and biometrics, and methods for the analysis of legal, ethical, and privacy issues in information systems.

CIS 330. Collaborative Technologies.  
(3-0-3); on demand.  
Prerequisite: CIS 101. This course is designed to provide students with an introduction to group support systems, electronic meeting management and other collaborative and groupware applications. The course addresses a wide range of topics including system implementation and design, electronic facilitation, business process reengineering, knowledge management and collaborative learning. Special emphasis will be placed on using groupware technologies and systems to create a store, and distribute explicit and tacit knowledge within contemporary organizations.

CIS 335. Telecommunications and Networking.  
(3-0-3); I, II.  
Prerequisite: choose one; CIS 202, 205, 211, 214, or 215. Fundamental concepts of digital networks and telecommunications technologies in a global environment. The course covers analysis, applications, and administration of computer networks and a broad range of current hardware and software.

(3-0-3); on demand.  
Prerequisites: CIS 101 & ACCT 281. Enterprise Systems are becoming a significant investment in today’s organization. This course presents a conceptual framework and overview on business enterprise systems and business processes. Emphasis will focus on the essential elements of business process integration. Current trends and issues related to business process transformation and improvement will be investigated.

(3-0-3); on demand.  
This course covers fundamental concepts of healthcare information systems; current and developing health and business information systems of interest to managers in health services organizations; healthcare information system architecture; security and privacy issues; uses of healthcare information clinical and strategic analysis and decision support; techniques required to develop and evaluate an information system request for proposal; and thoughts on the future of healthcare information systems including community health systems and web-based access to health information. The course will also cover current information and issues regarding the latest technology applications.
CIS 398. Practicum in Information Systems. (3 hrs.); I, II.
Provides work experience (non-compensated) in an occupational area. Student works under supervision in an approved position. Course credit commensurate with time worked, type of work, variety of work experience.

CIS 399. Selected Workshop Topics. (1 to 4 hrs.); on demand.
Prerequisites: junior standing and consent of instructor. Workshops on selected information systems subjects are presented periodically to supplement the basic course offerings in the department. Credit toward CIS or BIS options must be approved in writing by the student’s advisor.

CIS 405. Web Development Strategies and E-commerce. (3-0-3); on demand.
Prerequisites: CIS 311 or CS 380, and at least one from the following: CIS 302, 305, 314, 315. A practical introduction to concepts and development methods fundamental to the creation and deployment of global Internet based computer information systems. Topics include website development and support, Internet infrastructure technologies, database connectivity, electronic commerce technologies and business models, and Web server implementation strategies and practices. Students will work in groups to develop an electronic commerce website.

CIS 413. IS Design and Implementation. (3-0-3); on demand.
Prerequisite: CIS 211, & CIS 311 or CS 380. This course introduces the System Development Life Cycle (SDLC), information systems (IS) project management, systems analysis, structured systems design, information systems strategic planning, and best practices for the design, planning, implementation, and support of information systems. Students will learn how to do systems analysis and design for and how to plan an IS project and implement the project using project management principles. This class makes use of case studies to promote critical thinking and further understanding of topics covered in the class.

CIS 414. Designing and Implementing Collaborative Solutions. (3-0-3); on demand.
Prerequisite: CIS 311. This course provides a foundation in designing and implementing business solutions to support collaboration in global environments. The focus is on creating collaborative environments in which members of an organization can exchange ideas, share information, and work together on common projects and assignments regardless of their physical location. The course combines lecture, case studies, and hands-on experience.

CIS 426. Database Management Systems. (3-0-3); on demand.
Prerequisite: CIS 325 or CS 380. This course introduces fundamentals of designing databases and database applications in contemporary organizations. Emphasis is on database concepts, design, and understanding of formal data models. Students design and implement a relational database application.

CIS 430. Advanced Topics in Information Systems. (3-0-3); on demand.
Prerequisite: choose one of the following: CIS 202, 205, 211, 214 or 215. This course is intended to introduce students to the idea of Decision Support Systems (DSS), Expert Systems (ES), Executive Information Systems (EIS), Artificial Intelligence (AI), Modeling and other leading edge concepts in Information Systems.

CIS 439. Cooperative Education IV. (1 to 8 hrs.); on demand.
Prerequisites: CIS 311 and consent of instructor. This course provides on-site instruction and practical work experience in information systems in a paid position approved through an application process. A maximum of three credit hours is allowed as a CIS option elective.

CIS 442. Network Administration. (3-0-3); on demand.
Prerequisite: CIS 340, or consent of instructor. This course provides a foundation in the concepts of computer communications and networking. Students gain hands-on experience in managing, operating, and troubleshooting various local area networks and communications hardware and software.

CIS 443. Advanced Computer Networking Administration. (3-0-3); on demand.
Prerequisite: CIS 442 or consent of instructor. This course provides advanced skill level with the concepts and terminology of computer intercommunications and networking. The course relies on a hands-on approach as the primary teaching method to focus on organizational enterprise networking and studying specific network protocols. Hands-on tutorials for managing and operating various multi-vendor networks are used in the course.

CIS 476. Special Topics in Computer Information Systems. (1 to 3 hrs.); on demand.
Prerequisites: consent of instructor and one of the following: CIS 200 or CS 170. This course is for independent study of CIS topics of special interest. Student must prepare a written project proposal and justification for the independent study prior to registration. Proposals are approved based on their academic merit and the special needs of the student.

CIS 480. Cases in Information Technology. (3-0-3); on demand.
Prerequisites: CIS 311 and senior standing. This is a senior-level course that integrates case studies and other comprehensive experiences the application of concepts, theories, and skills associated with business information systems. Emphasis will be on the use of IT as an enabler of process improvement and process innovation. The course also involves the analysis, synthesis, application and evaluation of advanced concepts related to information systems technology, end-user information systems, global and ethical issues related to IT, technological training, and strategy planning for human aspects of technological change.

CIS 490. IS Project Management. (3-0-3); I, II.
Prerequisites: senior standing in CIS, CIS 325 or CIS 413 or BIS 440. Students will learn skills in information technology project management and will complete a capstone project in a real-world working environment. Working in teams, students analyze the
project in a paced approach, identify and document metrics and milestones, and deliver an information systems solution under deadline that meets the agreed-upon project objectives. Final deliverables include a term portfolio and a formal class presentation.

CMAP - Communication (Advertising/Public Relations) Courses

CMAP 166. Media Design & Layout. (3-0-3); I, II, III.
Develop basic publishing design skills using industry standard technology. Skills will be developed in image manipulations, word processing, layout, and design for various media.

CMAP 277. AD/PR Practicum. (1-0-1); I, II.
Prerequisite: CMAP 166. This course is designed to provide practical experience and leadership training in areas of advertising and public relations. Each level may be repeated for a total of two credit hours at each level.

CMAP 377. AD/PR Practicum. (1-0-1); I, II.
Prerequisite: CMAP 277. This course is designed to provide practical experience and leadership training in areas of advertising and public relations. Each level may be repeated for a total of two credit hours at each level.

CMAP 382. Public Relations Principles. (3-0-3); I, III.
Examination of the basic principles, practices, responsibilities, and ethics in the profession of public relations.

CMAP 383. Advertising Principles. (3-0-3); II, III.
Examination of the basic principles, practices, and ethics in the field of advertising.

CMAP 385. Public Relations Writing. (3-0-3); II.
Prerequisite: CMAP 382. Theory and practice of producing publicity tools for various media used in campaigns to promote and interpret personal, institutional and organizational objectives and activities. Emphasis is on writing and publicity problem solving.

CMAP 386. Social & Interactive Media. (3-0-3); I.
Prerequisite: CMAP 166. This course will prepare students to plan, create, design, and implement social and interactive media to achieve an organization’s advertising and public relations goals.

CMAP 399. Public Relations Workshop. (1 to 4 hrs.); on demand.
Prerequisite: CMAP 166. A hands-on workshop in preparing print-media public relations materials.

CMAP 477. AD/PR Practicum. (1-0-1); I, II.
Prerequisite: CMAP 377. This course is designed to provide practical experience and leadership training in areas of advertising and public relations. Each level may be repeated for a total of two credit hours at each level.

CMAP 482. Public Relations Campaigns. (3-0-3); II.
Prerequisites: COMM 320 and CMAP 385. An examination of case studies involving specific practices in carrying out campaigns in public relations.

CMAP 483. Advertising Copy & Design. (3-0-3); I, II.
Prerequisite: CMAP 166. Develop core concepts, methods, and practices used in designing and producing advertisements for print, television, and the Web.

CMAP 486. Adv. Campaigns & Media Buying. (3-0-3); I.
Prerequisite: CMAP 483. This course provides students with knowledge and skills development for planning, designing, implementing, and evaluating advertising campaigns. Students in this class will be expected to develop a complete advertising campaign that will include: development of campaign strategy, media buying/placement, and advertisement creation.

CMAP 499C. Senior Seminar. (3-0-3); II.
Prerequisites: senior standing and CMAP 482. This course is designed for students seeking careers in advertising, public relations, or organizational communication. It will provide them with information and instruction in skills self-assessment, job procurement processes and procedures, career field expectations and requirements, and production of a professional resume and portfolio. This course satisfies the integrative component of general education.

CMEM - Communication (Electronic Media) Courses

CMEM 101. Elements of Production I. (2-2-3); I, II.
An introduction to the basic production elements for audio and video. Includes message development and differentiation for various mediums.

CMEM 177. Electronic Media Production Practicum. (0-4-1); I, II.
Practical experience and opportunities in electronic media production.

CMEM 201. Elements of Production II. (2-2-3), I, II.
Prerequisites: CMAP 166 and CMEM 101. An introduction to the production process as it applies to the areas of audio and video. Practice in application of production elements within the process. Includes program/product conception and application of technology to achieve communication with an audience. An introduction to elements of post-production phase.

CMEM 210. Media Literacy. (3-0-3); I, II, III.
This course is designed to explore issues of media influence on everyday life and acquaint the general student with the way in
which media shapes aspects of modern society. This course satisfies the HUM I requirement for general education.

CMEM 277. Electronic Media Production Practicum. (0-4-1); I, II.
Practical experience and opportunities in electronic media production.

CMEM 340. Video Production and Direction I. (2-2-3); I, odd numbered years.
*Prerequisites: CMEM 101 and 201, or consent of instructor.* Basic video production techniques and an introduction to directing skills in a laboratory situation.

CMEM 341. Writing for Electronic Media. (3-0-3); I, II.
*Prerequisite: CMEM 101.* The study and application of theory and technique used in creating advertising, continuity news and public affairs programming as applied to the electronic media.

CMEM 350. Audio Production and Direction. (2-2-3); I, odd numbered years.
*Prerequisite: CMEM 201.* A study of the theory and application of audio production for all electronic media, including radio, television, cable, and film.

CMEM 377. Electronic Media Production Practicum. (0-4-1); I, II.
Practical experience and opportunities in electronic media production.

CMEM 381. Documentary Production. (2-2-3); II, odd numbered years.
*Prerequisite: CMEM 201.* The study and application of theories and techniques used in documentary video production.

CMEM 383. Animation Production. (2-2-3); I, even numbered years.
The study of traditional animation production techniques. Application of the theories and techniques of traditional animation video production.

CMEM 385. Narrative Video Production. (2-2-3); II, even numbered years.
*Prerequisite: CMEM 201.* The study and application of production techniques and theories used in narrative video production.

CMEM 390. Media Web Layout and Design. (3-0-3); I, II, III.
*Prerequisite: CMAP 166.* This course will focus on the fundamentals of Web design, layout, and basic site management. Students will prepare websites using industry standard software. Students will develop skills in writing/editing text for Web use, preparing graphics for the Web, streaming audio and video for the Web, creating interactive media for Web use, and overall layout and design.

CMEM 399. Workshop in Electronic Media. (1 to 3 hrs); on demand.
Workshops in various electronic media topics will be presented periodically, based on need and interest. Usually hands-on, experimental, and/or innovative, these workshops are designed to supplement various programs in electronic media. May be repeated in additional subject areas.

CMEM 420. Feature & Documentary Writing. (3-0-3); I, even numbered years.
*Prerequisite: CMEM 101 or consent of department chair.* Advanced theory and practices of writing for the electronic medium. Emphasis is placed on writing and production of features and documentaries for radio, television and cable systems.

CMEM 450. Electronic Media Management. (3-0-3); II, odd numbered years.
*Prerequisite: junior standing or consent of instructor.* The examination of administrative decision-making in electronic media. Attention is focused on audience research, sales regulation and personnel concerns. Special attention is given to the purpose and basic idea of programming in relation to audience composition.

CMEM 451. Pro Audio Recording Practices. (2-2-3); II, even numbered years.
*Prerequisite: CMEM 350 or consent of instructor.* Experience and advanced study in theory and applications in areas such as music recording and sound, with an emphasis on multi-track recording techniques.

CMEM 452. Issues in Contemporary Broadcasting. (3-0-3); on demand.
*Prerequisite: senior standing.* Treatment of current issues within the electronic media industry. Equates with WST 452.

CMEM 460. History of Broadcasting. (3-0-3); on demand.
*Prerequisite: senior standing.* Historical study of radio and television as a communication service and its development in the United States.

CMEM 477. Electronic Media Production Practicum. (0-4-1); I, II.
Practical experience and opportunities in electronic media production.

CMJN - Communication (Journalism) Courses

CMJN 177. Journalism Practicum. (0-4-1); I, II.
Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

CMJN 201. Newswriting and Reporting I. (3-0-3); I, II.
Gathering, organizing and writing news for mass media.

CMJN 204. Copy Editing & News Page Design. (3-0-3); II.
*Prerequisite: CMJN 201.* Study and application of principles, methods and techniques used in editing news copy and producing news page elements; instruction in design and layout of effective news pages using industry standard software.

CMJN 250. Newsgathering. (3-0-3); I.
*Prerequisite: CMJN 201.* Study and application of sources, meth-
ods, and technologies used in gathering and producing news material for print, broadcast, and online presentation. Includes instruction on the legal and ethical responsibilities of producing news material for a diverse society.

**CMJN 277. Journalism Practicum.**  
(0-4-1); I, II.  
Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

**CMJN 285. Introduction to Photojournalism.**  
(2-2-3); I, II.  
Lecture and laboratory, introduction to camera use, darkroom procedure, photo layout and practices in reporting news pictorially. Camera rental fee for students without suitable camera.

**CMJN 301. Advanced Multimedia News.**  
(3-0-3); II.  
*Prerequisites: CMEM 101 and CMJN 250.* Instruction in advanced, in-depth writing and reporting for the news for print, broadcast, and online media. Provides instruction and hands-on experience covering public affairs and societal events and issues using methods and technologies necessary for producing and presenting news for integrated news media organizations. Includes instruction on the legal and ethical aspects of producing news for a diverse society.

**CMJN 358. Sportswriting.**  
(3-0-3); II, alternating years.  
*Prerequisite: CMJN 201.* Philosophy and techniques in writing sports events stories, sports analysis and commentary for the print media.

**CMJN 364. Feature Writing.**  
(3-0-3); I, alternating years.  
*Prerequisite: CMJN 201.* Researching, organizing, writing and marketing of nonfiction articles.

**CMJN 377. Journalism Practicum.**  
(0-4-1); I, II.  
Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

**CMJN 464. Public Opinion and the News Media.**  
(3-0-3); I.  
A study of cultural, social and psychological aspects of public opinion and how it impacts and is influenced by the mass media. Includes analysis of public opinion's impact on the democratic process.

**CMJN 465. Editorial Writing.**  
(3-0-3); II, alternating years.  
*Prerequisite: CMJN 201.* Study and application of techniques and formats effective in writing opinion for the print media. Includes government, political, civic and social implications; legal and ethical guidelines.

**CMJN 476. Special Problems.**  
(1 to 3 hrs); I, II, III.  
*Prerequisite: consent of department chair.* Research on an original project with appropriate written report, within a subject area.

**CMJN 477. Journalism Practicum.**  
(0-4-1); I, II.  
Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

**CMJN 492. Media Law and Ethics.**  
(3-0-3); I, II.  
*Prerequisite: junior standing.* This course covers fundamental First Amendment principles and cases and surveys media law, regulations and ethics necessary for journalists working in print or broadcast media or in advertising and public relations.

**CMSP - Communication (Speech) Courses**

**CMSP 100. Voice and Articulation.**  
(3-0-3); II.  
Essentials of distinct utterance, phonetic transcription, and uses of the vocal mechanism.

**CMSP 371. Professional Communication Practices and Standards.**  
(3-0-3); I, II.  
*Prerequisite: CMSP 108.* Enhances and refines the presentational and writing styles and standards for the communication professional. Topics include use of new technology in research, writing, and presentations. A variety of presentation formats are examined and performed from a professional perspective.

**COMM - Communication (General) Courses**

**COMM 108. Fundamentals of Speech Comm.**  
(3-0-3); I, II, III.  
Practice and study of speech communication fundamentals, including: interpersonal skills; critical listening; small group problem solving; information gathering; preparation and delivery of a variety of informal presentations. *This course satisfies the required core-oral communications for general education.*

**COMM 110. History of Communications Media.**  
(3-0-3); I, II.  
This course is designed to provide information about the various media that make up the field of communication and includes the historical development and the interrelationships among the various areas of communication. Also focuses on the ethical and social dilemmas facing today’s media and communication practitioners.

**COMM 200. Oral Interpretation.**  
(3-0-3); I.  
Communicating the meanings of prose, poetry, and dramatic literature through the use of body and voice.

**COMM 210. Listening.**  
(3-0-3); I.  
The study and practice of skills in both retentive and empathic listening.
COMM 220. Introduction to Communication Theory. (3-0-3); I, II.
A survey of communication theory.

COMM 250. Introduction to Intercultural Communication. (3-0-3); I.
Prerequisite: COMM 108. A focus on intercultural misunderstanding and its remedies. Topics include the nature of culture, cultural value patterns, ethnic and gender identities, culture shock, the relationship between language and culture, differences in verbal styles, intercultural differences in nonverbal communication, the origins and nature of human bias and prejudice, the management of intercultural conflict, the challenges of intercultural-intimate relationships, questions of global identity, E.net identity, and communication ethics. This course satisfies the SBS I requirement for general education.

COMM 230. Interpersonal Communication. (3-0-3); II.
Examines the variables involved in the communication between individuals. Topics include self-concept, perception, cultural diversity, listening, verbal and nonverbal messages, and conflict as they relate to building and maintaining relationships in a variety of settings.

COMM 290. Conflict and Communication. (3-0-3); I.
Students will study fundamentals of conflict management and demonstrate specific strategies for addressing conflicts typical to everyday life at home, at work, in their communities and across cultures. This course satisfies the HUM II requirement for general education.

COMM 300. Oral Communication. (3-0-3); I.
Prerequisite: COMM 108. Development of appropriate classroom voice through study, exercise, practice in reading, describing, and motivating. Designed for elementary teaching majors.

COMM 305. Readers’ Theatre. (3-0-3); II.
Prerequisite: COMM 200 or consent of instructor. Applying the theories of oral interpretation to an audience-oriented production.

COMM 309. Public Presentations. (3-0-3); II.
Study and practice of speech preparation, composition, research, delivery, analysis, and criticism. Public-setting speeches will be given, including speeches to teach, persuade, and entertain, using various delivery styles including manuscript, impromptu, extemporaneous, and recitation.

COMM 320. Research Methods in Comm. (3-0-3); I, II.
Prerequisites: COMM 108 and COMM 220. Examines a variety of means to gather information about audiences and messages in a systematic, valid, and reliable manner. Subjects include development of research questions and hypotheses, gathering data through quantitative and qualitative methods, and analyzing and reporting data.

COMM 339, 439. Cooperative Education. (1 to 8 hrs.); I, II, III.
Prerequisite: consent of department chair. The Department of Communication, Media & Leadership Studies offers a series of cooperative study courses allowing students to alternate semesters of on-campus studies with periods of full-time related work experience. See general section of the catalog for a more complete description of Cooperative Education. See restrictions applying to all programs in communication.

COMM 347, 447. Internship. (1 to 3 hrs.); I, II, III.
Prerequisite: consent of department chair. May be repeated. Competency-based practical experiences aimed at increasing the proficiency of the student in assigned positions. See restrictions applying to all programs in communication.

COMM 350. Communication, Culture and Diversity. (3-0-3); I.
Prerequisite: COMM 108. An introduction to basic organizational communication concepts and principles, combined with development of skill in interviewing, group decision making, and presentational speaking in the workplace.

COMM 367. Intro. to Organizational Comm. (3-0-3); I, II.
Prerequisite: COMM 108. An examination of speech communication theory and skills useful under conditions of cultural diversity with a focus on the improvement of communication across cultural and group verbal and nonverbal language systems. Equates with IST 350.

COMM 376. Argumentation and Debate. (3-0-3); II.
Making rational decisions through the debate process. Analysis, evidence, briefing and refutation.

COMM 382. Small Group Communication. (3-0-3); I.
Study and development of communication skills required for effective participation in small task-oriented groups. Students will learn about and practice participating, leading, managing meetings, dealing with conflict, solving problems, making decisions and assessing performance in the small group context.

COMM 385. Persuasive Communication. (3-0-3); II.
Nature and methods of persuasion for influencing group opinion and action. Recommended for business majors.

COMM 388. Speech Activities. (1-2-2); I, II.
Prerequisite: consent of instructor. Independent guided study in specific areas of speech through participation in the Intercollegiate Individual Events program. May be repeated up to a maximum of six hours credit.

COMM 390. Conflict and Communication. (3-0-3); II.
Theory and practice concerning the treatment of interpersonal conflict. Conflict will be defined and examined from practical and philosophical perspectives. Students will study and demonstrate
specific strategies for addressing conflicts typical to everyday life at home, at work, and in the communities.

**COMM 400. Interviewing.**  
(3-0-3); I.  
A detailed study of the various interview types, coupled with role playing experiences. Includes media, employment, and health care interviews.

**COMM 401. Communication and Leadership.**  
(3-0-3); II.  
This course involves the study and practice of leadership from a communication perspective. Particular focus will be on the relationship between communicating and leading. Leadership communication concepts and theories in organizational, group, and public contexts will be examined. Students will analyze their communication styles and personal leadership styles and develop leadership communication skills through team projects and classroom exercises.

**COMM 405. Communication Issue Management.**  
(3-0-3); II.  
This course examines how a variety of organizations mediate public policy issues from a communication perspective. Course study involves an in-depth theoretical examination of corporate advocacy and issue management in America from a communication perspective. Throughout the semester, students will consider current issue management theory, the pragmatics of issue management, and issue management strategies through application of the theory to past and on-going issue management campaigns in U.S. politics.

**COMM 411. Advanced Public Presentations.**  
(3-0-3); II.  
Exposure to traditional preparation and delivery of complex speeches.

**COMM 462. Media Criticism.**  
(3-0-3).  
Examination of broadcasting in sociological, aesthetic, historical, psychological and humanistic terms.

**COMM 467. Organizational Communication.**  
(3-0-3); II.  
Study of the functions of communication within organizations and professional environments. Students may be assessed a fee for materials distributed in class.

**COMM 476. Special Problems.**  
(1 to 3 hrs.); I, II, III.  
Prerequisite: consent of department chair. Research on an original project with appropriate written report within a subject area.

**COMM 482. American Popular Cultural and Communications Technology.**  
(3-0-3); on demand.  
Examination of the role and effects of major advances of communication technology on the course of American popular culture and society in the past, present and future.

**COMM 483. Advanced Small Group Comm.**  
(3-0-3); on demand.  
Study of current theory and concepts pertaining to the discussion process.

**COMM 495. Administering the Communication Program.**  
(3-0-3); on demand.  
Development and management of communication programs and co-curricular activities. Exposure to traditional high school forensics events with experience in each. Introduction to basic theatre techniques. Field experience required for theatre majors pursuing the teaching option.

**COMM 499C. Senior Seminar in Communication.**  
(3-0-3); II.  
This course is designed for students majoring in applied communication. It will entail individualized and group instruction, assessment and career preparation focused on disciplinary and general education competencies and life skills with an emphasis on the integration of knowledge and skills acquired in the program. *This course satisfies the integrative component for general education.*

**CRIM - Criminology Courses**

**CRIM 210. The Sociology of Deviance.**  
(3-0-3); I, II.  
This course is designed to introduce students to the sociological and criminological study of deviant and criminal behavior. Students are also introduced to theories of crime and deviance. Equates with SOC 210.

**CRIM 250. Introduction to the Criminal Justice System.**  
(3-0-3); I, II.  
This course introduces students to the current structure and functioning of the criminal justice system in the U.S. from arrest, district attorney’s discretionary authority in charging, indictments, conviction, sentencing, and the appeals process. Students are provided with a brief history of the American criminal justice system including policing, the courts, and the correctional system.

**CRIM 300. The Criminogenic Family.**  
(3-0-3); I, II.  
The course focuses on family risk factors for later delinquency and criminal behavior as well as preventative intervention and treatment. This course examines a variety of family issues including child maltreatment, domestic violence, family alcoholism, drug addiction, family chaos, inadequate or neglectful parenting, corporal punishment, which are known risk factors for later criminal behavior. Students gain a general understanding of the macro-level processes that have detrimental effects on family functioning and family structure. Equates with WST 302 and SWK 300.

**CRIM 306. Juvenile Delinquency.**  
(3-0-3); I.  
Prerequisites: CRIM 210 and three additional hours of criminology or consent of instructor. This course examines the extent, ecological distribution, and theories of delinquency in contemporary American society, including a critical examination of trends and methods of treatment for delinquency. Criminology majors must take this course or CRIM 401. Equates with SOC 306 and SWK 306.
(3-0-3); I.  
This course provides students with a variety of theoretical explanations and examples of corporate and organizational crime as well as crime committed by individuals in the workplace. Equates with SOC 315.

CRIM 316. Global Crime and Terrorism.  
(3-0-3); I.  
Students are introduced to international crime and terrorism in the 19th, 20th and 21st centuries through study of government-organized Armenian Genocide, the Holocaust and the Nuremberg Tribunal and the initiation of human rights laws following the end of World War II. Students are also introduced to the study and structure of international terrorism that has emanated from the Neo-Salafi and Wahhabi ideology of Radical Muslims beginning in the 20th century after the state of Israel was formed. Other types of organized crime that is discussed will include the following: corruption, drug trafficking, weapons trafficking, and human trafficking. The new International Criminal Court is introduced to students as well as international civil cases involving human rights violations. Equates with SOC 316.

CRIM 317. Police Culture.  
(3-0-3); I.  
This course provides detailed information about the paramilitary structure of the law enforcement agencies. Students learn about the history of policing, the code of silence, police brutality, corruption, and the history of police commissions. Students gain an understanding of the bureaucratic, organizational and political pressures that exist within and outside these organizations. Students develop a better understanding of the Bill of Rights and how that affects police work as well as Supreme Court cases and decisions that have impacted law enforcement practices. Equates with SOC 317.

(3-0-3); II.  
Prerequisites: SOC 101, SOC 203 or WST 273 and/or consent of instructor. This course offers social science and experiential exposure to the controversies, theories, patterns, policies, and treatment unique to women's experiences with date, acquaintance, and spousal violence. Focus also is given to marginalized groups, including women of low income, women of color, and women in same-sex relationships. Equates with WST 333 and SOC 333.

CRIM 345. Correctional Institutions.  
(3-0-3); III.  
Prerequisites: CRIM/SOC 210 and junior standing, or consent of instructor. This course familiarizes students with a wide range of correctional settings through daily travel to correctional facilities throughout Kentucky and neighboring states. The institutions include local, state, and federal correctional facilities for juveniles and adult offenders. Students are required to integrate corrections literature with their experiential observations.

(3-0-3); II.  
Prerequisite: SOC 350 or WST 273. This course explores current theoretical debates and empirical studies on the global sex industry. Broad topics in this course include the feminist sex wars, stripping, pornography, prostitution and sexual trafficking. Equates with WST/SOC 363.

CRIM 380. Race, Class, Gender and Crime.  
(3-0-3); I, II.  
This course focuses on the intersection of race, class and gender and the ways these factors combine to affect people charged with crime. Emphasis is on how the criminal justice system operates under different levels of oppression and the consequent actions taken against those people who have been the objects of society’s punishment. Equates with WST 380 and SWK 381.

CRIM 385. Contemporary Legal Issues in the Criminal Justice System.  
(3-0-3); I.  
Prerequisite: CRIM 250. This course will explore the nature, functions, limitations and objectives of law, criminal courts, the grand jury and petit jury, family law, and civil liability for police and correctional officers. This course will also cover the impact of the United States Constitution and its amendments on the criminal justice system. Included are the 4th, 5th, 6th, 8th and 14th Amendments as they affect the accused, the convicted, and the employees working in the criminal justice system.

CRIM 388. Sociology of Punishment.  
(3-0-3); II.  
Prerequisite: CRIM/SOC 210. This course provides the student with background knowledge of the development of ideas and actions taken against those people who have been the objects of society’s punishment. Equates with SOC 388.

CRIM 395. Sociology of Serial Murder.  
(3-0-3); on demand.  
Prerequisites: CRIM 306 or CRIM 401, six additional hours of criminology, sociology, or psychology, and junior or senior standing. This course is designed to provide students with an in-depth examination of the serial killers among us. It focuses on the myths and stereotypes that have evolved from mass media and public efforts to find explanations for the relatively rare phenomenon of serial murder. Case studies are used to introduce several serial killers that have plagued the streets of America and abroad.

CRIM 399. Selected Topics.  
(1 to 3 hrs.); II.  
Unique topics and learning experiences that supplement regular course offerings. May be repeated in additional subject areas.

CRIM 401. Criminology.  
(3-0-3); II.  
Prerequisites: CRIM 210 and three additional hours of CRIM. This course provides a thorough examination of criminological theories. Students are also provided with explanations of the causes of crime, as well as the methods of effective treatment and prevention of crime. Criminology majors must take this course or CRIM 306. Equates with SOC 401.
CRIM 416. Working with Offenders.  
*(3-0-3); II.*  
In this course, students learn the basic structure of the counseling process with offenders, including techniques and practice skills. Equates with SWK 416.

*(3-0-3); on demand.*  
This course provides a clear understanding of the manner in which laws are formed to protect certain groups and marginalize others who are often perceived as threatening. Students deconstruct specific laws by analyzing the formation of criminal law from its incipient stages of development in American society.

CRIM 465. Environmental Sociology.  
*(3-0-3); II.*  
This course introduces students to this subfield of sociology examining current environmental issues and conflicts and various theoretical perspectives used to understand them and formulate solutions. The role of grassroots organizations is also reviewed. Equates with SOC 465.

CRIM 476. Special Problems.  
*(1 to 3 hrs.); I, II, III.*  
Prerequisites: three hours sociology general education and nine additional hours of CRIM/SOC. Arranged with the department to study some particular aspect of the field of criminology.

CRIM 490. Practicum in Criminology.  
*(0-0-5); I, II, III.*  
Prerequisite: nine hours of criminology. Corequisite: CRIM 491. The course is designed to meet with practicum students as a group for a class that meets every week. Students discuss their practicum and are assigned written papers associated with the practicum experience. The course consists of practical experience in a jail, juvenile or adult correctional institutions, juvenile or adult probation and parole agency, or other related agency. A minimum of 240 hours will be spent at the assigned agency.

CRIM 491. Practicum Seminar.  
*(1-0-1); I, II, III.*  
Corequisite: CRIM 490. This course is required for all criminology majors.

CRIM 499C. Senior Criminology Capstone.  
*(3-0-3); I, II.*  
Prerequisites: CRIM 306 or 401, CRIM/SOC 450, SOC 451, six additional hours of criminology, and senior standing. This course is designed to integrate and synthesize the students’ knowledge of criminology prior to graduation. This includes a review of substantive theories, research methods, and information about criminal behavior and the criminal justice system. This course satisfies the integrative component for general education.

CRW - Creative Writing Courses

CRW 499C. Senior Thesis.  
*(3-0-3); I or II.*  
Prerequisites: senior standing in the BFA Program and completion of at least 24 hours in English courses and 300 level BFA in Creative Writing courses. Senior BFA majors write a thesis arranged with a member of the creative writing faculty and submit it to a BFA faculty committee for appraisal. This course satisfies the integrative component for general education.

CS - Computer Science Courses

CS 170. Introduction to Computer Science.  
*(3-2-4); I, II.*  
Prerequisite: MATH 152 or minimum ACT math subscore of 22. An overview of modern computer science; mathematical treatment of algorithms; implementation of fundamental programming principles in a modern programming language; techniques of problem solving related to computing. Designed for students who have basic familiarity with Microsoft Office applications. Equates with MATH 170.

*(3-0-3); II.*  
Prerequisite: CS/MATH 170 or CIS 101 or IET 110 or SCI 110. An introductory course to the general principles of computer games and to primary 3D computer animation. Topics include interface structure, strategies and tactics for making computer games, and animation specific topics including modeling, materials, lighting and output.

CS 212. Game Implementation Technique.  
*(3-0-3); II.*  
Prerequisite: CS 172. This course introduces Win32 user-interface programming. GDI+, and the fundamentals of 2D bitmap operations, which are the foundation of all computer graphics. It also covers mathematical modeling which is used for game programming.

CS 239. Cooperative Education I.  
*(1 to 3 hrs.); I, II.*  
Prerequisite: department chair approval. An opportunity for students to participate in co-op or intern positions. This course may not be counted toward elective credits for the area of concentration, major, or minor in Computer Science.

CS 270. Introduction to Scientific Computing.  
*(3-0-3); II.*  
Prerequisite: ACT math subscore of 22, or “C” or better in MATH 152. An introductory computing course emphasizing fundamental computing tools and techniques, and their application to solving scientific problems. Topics include operating systems, hardware, popular and scientific software, C++ programming in the context of solving scientific problems, and electronic communication. Equates with PHYS 270.

CS 303. Data Structures.  
*(3-0-3); I, II.*  
Prerequisite: CIS 205. Key concepts of data definitions, such as lists, stacks, and queues. Recursion, graphs and trees, sorting and searching. Structured program design, elementary data structures and the study of algorithms as a tool of program design. Equates with CIS 303.

*(3-0-3); I, II.*  
Prerequisite: CS 303. An in-depth study of advanced nonlinear
data structures, such as trees and graphs, as well as their implementations and applications. A continuation of advanced programming techniques, including inheritance and polymorphism. A thorough study of algorithms and algorithm efficiency.

**CS 312. Game Prototype Design and Implementation.** (3-0-3); II.
Prerequisite: CS 303. Introduction to the industry standard software for game prototype design and implementation. Use of techniques and critical thinking skills for modeling and animation. Customization options and strategies for 3D production.

**CS 335. Theory of Programming Languages.** (3-0-3); I.
Prerequisite: CS 310. This course is an introduction to the fundamental principles underlying the design of programming languages. This course investigates the programming features of several common languages from the point of view of implementation. The student is exposed to the language characteristics along with the details and difficulties in their implementation.

**CS 339. Cooperative Education II.** (1 to 6 hrs); I, II.
Prerequisite: department chair approval. An opportunity for students to participate in co-op or intern positions. This course may not be counted toward elective credits for the area of concentration, major, or minor in Computer Science.

**CS 360. Operating Systems.** (3-0-3); II.
Prerequisite: CS 310. Topics to be covered include operating system philosophy, tasking and processes, process coordination and synchronization, scheduling and dispatch, physical and virtual memory organizations, device management, file systems and naming, security and protection, communications and networking, and distributed systems.

**CS 372. Math for Computer Games.** (3-0-3); II.
Prerequisites: MATH 175 and CS 312. This course will cover mathematical topics including geometry, trigonometry, vector operations, matrix operations, transformation and motion in two and three dimensions in the context of how they are used for video game development. Students will use mathematical concepts to design and implement computer games.

**CS 380. Software Engineering.** (3-0-3); I.
Prerequisite: CS 310. This course is an introduction to the discipline of software engineering. Students will explore the major phases of the software life cycle, including analysis, specification, design, implementation, testing, and maintenance of software systems. Techniques for creating documentation and using software development tools will be presented. Students will gain experience in these areas by working in teams on software development projects.

**CS 412. Software Engineering for Computer Games.** (3-0-3); I.
Prerequisites: CS 212 and CS 372. Software Engineering for Computer Games uses an object-oriented (OO) approach. The course will incorporate Unified Modeling Language (UML) for OO analysis and design, including software patterns and how to incorporate them into the design process. Topics of Software Engineering are presented in the context of having student teams design and implement computer games. Greater emphasis is placed on the student projects as compared to other gaming courses. Course includes the topics of listeners, collisions, simulating physics, OpenGL graphics, etc.

**CS 420. Data Mining Concepts.** (3-0-3); I.
Prerequisites: CS 303. This course introduces the basic concepts of data mining and knowledge discovery. Topics include: data types, data patterns, data preprocessing, data cleaning, outlier analysis, features reduction, feature discretization, data integration, data mining process, learning machines, statistical learning theory, learning methods, model estimation, Bayesian inference, Logistic regression, classification, and prediction.

**CS 439. Cooperative Education III.** (1 to 12 hrs); I, II.
Prerequisite: department chair approval. An opportunity for students to participate in co-op or intern positions. This course may not be counted toward elective credits for the area of concentration, major, or minor in Computer Science.

**CS 450. Computer Graphics.** (3-0-3); on demand.
Prerequisites: CS 310 and MATH 275. An in-depth study of the techniques, methods, and mathematics behind computer graphics. This course will examine the spectrum of today’s graphics systems, discuss fundamental graphics techniques and the associated mathematics, transformations, rendering, geometric modeling, and animation.

**CS 460. Scientific and Parallel Computing.** (3-0-3); on demand.
Prerequisites: CS 310 and MATH 312. An introduction to scientific and parallel computing. This course explores computers with vector and parallel architectures, development of algorithms for parallel architectures, and programming on parallel and vector computers.

**CS 470. Artificial Intelligence.** (3-0-3); on demand.
Prerequisite: CS 310. Students in this course will learn how to use artificial intelligence concepts and techniques to solve computer science and engineering problems. Topics include: introduction to AI programming, predicate calculus logic, state space search, heuristic search, knowledge representation, control mechanisms, programming languages for AI, automated reasoning, machine learning, and expert systems.

**CS 472. Multiplayer Networking Game Programming.** (3-0-3); II.
Prerequisite: CS 372. This course will cover the topics of Computer Networks and Databases. It will include multiplayer game programming, specifically with TCP/UDP, and Sockets. Relational databases will be used to store data and stats from a game.

**CS 476. Special Problems.** (1 to 3 hrs); I, II, III.
Prerequisite: upper division standing; consent of department pri-
or to registration. Designed for the purpose of permitting a student to do advanced work as a continuation of an earlier experience or to work in an area of special interest.

(3-0-3); I.  
Prerequisite: CS 360. Students in this course will learn the fundamentals of computer security. Topics include: principles of computer security, authentication, access control, malicious software, program security, trusted operating systems, security requirements for database systems, and ethical issues in computer security.

(3-0-3); II.  
Prerequisite: CS 310. Students in this course will learn the fundamentals of wired and wireless network security. Topics include: network defense techniques, network firewalls, packet filtering, authentication protocols, virtual private networks, transport-layer security, secure routing, wireless network security, web security, IP security, intrusion detection, and intrusion prevention.

CS 499C. Senior Thesis I.  
(1-2-2); I, II.  
Prerequisites: Senior standing and by petition. Designed to give the student an introduction to research and literature in mathematics, computer science or physics. This course, combined with CS 499D, satisfies the capstone component for general education. This course is equated with MATH 499C and PHYS 499C. Prior to registration for this course, students must file a Thesis Proposal Form in the MCSP department office. This course satisfies the integrative component for general education.

CS 499D. Senior Thesis II.  
(0-2-1); I, II.  
Prerequisite: CS/MATH/PHYS 499C. Completion of the directed research project begun in CS/MATH/PHYS 499C. A formal report that includes the basic literature search and appropriate original work will be prepared in a form suitable for submission to a scientific journal. A technical oral presentation of the research will be made to the department. In addition, an oral or poster presentation at a local, state, regional, or national meeting will be required. This course, combined with CS/MATH/PHYS 499C, satisfies the capstone component for general education. This course satisfies the integrative component for general education.

CTE - Career and Technical Education Courses

CTE 185. New Teacher Institute Career and Technical Education.  
(3-0-3); I, II, III.  
Restriction: restricted to individuals holding a one-year certificate for teaching vocational industrial education preparation level. Emphasis on how to prepare and implement course organization, lesson planning, teaching techniques, and evaluation as it relates to industrial-technical subject matter.

CTE 207. Foundations of Career and Technical Education.  
(3-0-3); II.

Orientation for students enrolled in vocational teaching program in agricultural education, industrial education, and family and consumer science education. Course will provide a historical overview of vocational education legislation.

CTE 364. Guidance in Career and Technical Education.  
(3-0-3); on demand.  
Study of the concept of career education and to explore the new emerging role of the guidance counselor in regard to problems that exist in our present educational system, innovative concept of career education, the counselor and classroom teacher’s responsibility within the framework of career education, evaluation of career education, and exploring future implications for developing positive attitudes and values for work for all students, including the disadvantaged and handicapped.

CTE 372. Technical Media Development.  
(2-2-3); I.  
The use of technology in preparing technical presentations, including issues and delivery methods. A portfolio will be maintained and presented at the end of class.

CTE 381. Related Science, Mathematics and Technology in Occupations.  
(0-0-6); on demand.  
Offered only through written examination. Courses will be offered only through a scheduled examination. (Written, performance, and oral examinations in the field of specialization that the candidate is preparing to teach.)

CTE 382. Manipulative Skills in Occupations.  
(0-0-6); on demand.  
Offered only through technical competence examinations. Courses will be offered only through a scheduled examination. (Written, performance, and oral examinations in the field of specialization that the candidate is preparing to teach.)

(0-0-6); on demand.  
Offered only through oral examinations. Courses will be offered only through a scheduled examination. (Written, performance and oral examinations in the field of specialization that the candidate is preparing to teach.)

CTE 388. Methods of Curriculum Development.  
(3-0-3); II.  
Prerequisite: CTE 207. A comprehensive study of current curriculum content in vocational education. Emphasis on modifying and developing new curricula. Equates with HS 388.

CTE 392. Methods of Instructional Technology.  
(2-2-3); I, III.  
Restriction: admission to TEP. Holistic approach to curriculum development with an introduction to the use of technology to develop and enhance curriculum and instruction. A portfolio will be maintained and presented at the end of the class.

CTE 393. Methods in Career and Technical Education.  
(3-0-3); I.  
Basic principles of teaching and learning with practical applica-
tions of procedures used in career and technical education programs.

**CTE 394. Practicum in Career and Technical Education.**
(4 to 8 hrs.); on demand.
*Prerequisite: CTE 393.* Each student is assigned to an approved student teaching center offering comprehensive teaching experiences at the preparation-industrial education level. Directed observations and supervised teaching in approved area vocational school or an extension center in the trade and area in which the certificate is desired. Candidates for the bachelor's degree complete a minimum of 90 hours of supervised student teaching, 120 hours of directed observation, and 40 hours of participation. This experience carries eight hours of credit.

**CTE 395. Special Problems in Career and Technical Education.**
(1 to 3 hrs.); I, II, III.
*Prerequisite: consent of instructor.* Individual problems dealing with specific areas in the teaching field of the student. Opportunity of pursuing a technical problem in a laboratory orientation is provided. Conferences with the instructor are scheduled as needed.

**CTE 396. Evaluation in CTE.**
(3-0-3); II.
*Prerequisite: MATH 152 or higher.* The study of methods of evaluation, how to prepare evaluation instruments; techniques of assessing technical competency; explanation of test results; and the improvement of instruction.

**CTE 400. Preparation for Technology Education.**
(4-0-4); on demand.
*Restriction: four years of successful teaching experience in career and technical education. Prerequisite: consent of instructor required.* Seminar designed for individuals who have four years of successful teaching experience and desire dual certification to include industrial education at the orientation and exploration levels.

**CTE 401. Preparation for Career and Technical Education.**
(4-0-4); on demand.
*Restriction: four years of successful teaching experience in industrial education.* Seminar designed for individuals who have four years of successful teaching experience at the industrial education orientation and exploration levels and desire dual certification to include industrial education at the preparation level.

**CTE 470. Methods of Instruction.**
(3-0-3); I.
*Restriction: admission to TEP.* The principles of instructional methods which apply to the teaching of career and technical education subject matter which is included under the major program components of Orientation/Exploration and Preparation Level education programs.

**CTE 478. Student Teaching Practicum.**
(12-0-12); I, II.
*Restriction: admission to TEP.* Each student is assigned to an approved student teaching center offering comprehensive teaching experience in career and technical education.

**CTE 497. Seminar in Career and Technical Education.**
(1-0-1); I.
Current problems, issues, and trends in vocational education.

**CTMR - Computed Tomography/Magnetic Resonance Courses**

**CTMR 403. Computed Tomographic Physics and Instrumentation.**
(3-0-3); I.
*Prerequisites: CTMR 405 and 413. Corequisites: CTMR 443, 467 and 483. Restriction: admission to the computed tomography/magnetic resonance program.* The study of concepts and theories of computerized tomographic physics and instrumentation with emphasis on areas such as systems operation, imaging processing artifacts, and image quality. Three hours of didactic experience per week.

**CTMR 405. Computed Tomography/Magnetic Resonance Sectional Anatomy.**
(4-0-4); III.
*Corequisite: CTMR 413. Restriction: admission to the computed tomography/magnetic resonance program.* A study of gross anatomy utilizing a systemic approach to identify and analyze anatomic structures as imaged by computed tomography and magnetic resonance. Emphasis will be placed on relationship and functional analysis of systems.

**CTMR 413. Advanced Patient Care.**
(2-0-2); III.
*Corequisite: CTMR 405. Restriction: admission to the computed tomography/magnetic resonance program.* An advanced study of patient care with emphasis on patient care specific to the specialty area and acute medical emergencies. Two hours didactic and two hours of laboratory experience per week.

**CTMR 443. Imaging Procedures in Computed Tomography.**
(3-2-4); I.
*Prerequisites: CTMR 405 and 413. Corequisites: CTMR 403, 467 and 483. Restriction: admission to the computed tomography/magnetic resonance program.* A study of imaging procedures and protocols utilized in computerized tomography examinations. Emphasis will be placed on protocol selection for imaging application and pathology of areas such as the head, neck, spine, chest, abdomen, pelvis, musculoskeletal system, and interventional/special procedures. Pre-examination, patient care preparation, and contrast administration procedures will be discussed.

**CTMR 451. Magnetic Resonance Physical Principles of Image Formation.**
(4-0-4); II.
*Prerequisites: CTMR 403, 443, 467 and 483. Corequisites: CTMR 455, 461 and CTMR 499C. Restriction: admission to the computed tomography/magnetic resonance program.* This course is designed to provide the student with a comprehensive overview of magnetic resonance. Topics include instrumentation, magnetism, MR signal production, tissue characteristics, spatial localizations, pulse sequencing, imaging parameters/options, special applica-
tions, safety, and quality assurance.

CTMR 455. Imaging Procedures in Magnetic Resonance.
(3-0-3); II.
Prerequisites: CTMR 403, 443, 467 and 483. Corequisites: CTMR 451, 461 and CTMR 499C. Restriction: admission to the computed tomography/magnetic resonance program. The study of imaging techniques and pathological correlation for the various regions in the body. Specific clinical application, coils, scan sequences, protocols, and positioning criteria will be covered in this course.

CTMR 461. Magnetic Resonance Practicum I.
(0-40-5); II.
Prerequisites: CTMR 403, 443, 467 and 483. Corequisites: CTMR 451, 455 and CTMR 499C. Restriction: admission to the computed tomography/magnetic resonance program. Clinical application of technical and professional aspects of magnetic resonance in a healthcare setting. The student will be required to demonstrate clinical competency in a number and variety of procedures as required by the American Registry of Radiologic Technologists (ARRT).

CTMR 467. Computed Tomography Practicum I.
(0-40-5); I.
Prerequisites: CTMR 403 and 413. Corequisites: CTMR 403, 443 and 483. Restriction: admission to the computed tomography/magnetic resonance program. A study of imaging procedures and protocols utilized in computed tomography examinations. Emphasis will be placed on protocol selection for image application; pathology of areas such as the head, neck, spine, chest, abdomen, pelvis, musculoskeletal system; and intervention/special procedures. Pre-examination, patient care preparation, and contrast administration procedures will be discussed.

CTMR 477. Advanced Imaging Practicum I.
(0-40-4); III.
Prerequisites: CTMR 451, 455, 461 and CTMR 499C. Restriction: admission to the computed tomography/magnetic resonance program. A continuation of clinical application and professional aspects of computed tomography/magnetic resonance in a healthcare setting with an emphasis on the role of the student as an entry level practitioner. The student will be required to demonstrate clinical competency in a number and variety of procedures as established by the American Registry of Radiologic Technologists (ARRT).

CTMR 483. Seminar in Computed Tomography.
(2-0-2); I.
Prerequisites: CTMR 405 and 413. Corequisites: CTMR 403, 443 and 467. Restriction: admission to the computed tomography/magnetic resonance program. This is designed to access the student’s knowledge and application of computerized tomography. Based on the assessment results, the faculty will provide review and learning experiences to assist the student in meeting identified learning needs. Two hours of didactic experience per week.

CTMR 485. Advanced Imaging Practicum II.
(0-40-4); III.
Prerequisite: CTMR 477. Restriction: admission to the computed tomography/magnetic resonance program. A continuation of the clinical application and professional aspects of computed tomography/magnetic resonance in a healthcare setting with an emphasis on the role of the student as an independent entry level practitioner. The student will be required to demonstrate clinical competency in a number and variety of procedures as required by the American Registry of Radiologic Technologists (ARRT).

CTMR 499C. Seminar in Magnetic Resonance.
(3-0-3); II.
Prerequisites: CTMR 403, 443, 467 and 483. Corequisite: CTMR 451, 455 and 461. Restriction: admission to the computed tomography/magnetic resonance program. Major principles of magnetic resonance from previous courses are applied. Using scientific inquiry, the student will complete a capstone project to be presented at an imaging conference. In addition, students will review magnetic resonance content with consideration of clinical systems, physical principles and imaging applications. This course satisfies the integrative component for general education for students completing a major in computed tomography/magnetic resonance.

DMS - Diagnostic Medical Sonography Courses

DMS 400. Introduction to Sonography.
(1-0-1); III.
Corequisites: DMS 402A and 408. Restriction: admission into the diagnostic medical sonography program. An introduction to diagnostic medical sonography with emphasis on the history of sonography, the professional role of the sonographer, and the correlation of clinical laboratory tests to sonographic procedures. Four hours of didactic instruction per week for four weeks.

DMS 402A. Scanning Techniques I.
(0-2-1); III.
Corequisites: DMS 400 and 408. Restriction: admission into the diagnostic medical sonography program. An introduction to the performance of sonographic procedures. Emphasis is on equipment operation, image production, and basic scanning techniques. Eight hours of laboratory experience per week for four weeks.

DMS 408. Sonographic Sectional Anatomy.
(2-0-2); II.
Corequisites: DMS 400 and 402A. Restriction: admission into the diagnostic medical sonography program. A study of sectional anatomy as visualized by sonographic imaging. Anatomic areas include abdominal viscera and vasculature, superficial structures, male and female pelvis, and fetal anatomy. Eight hours of didactic instruction per week for four weeks.

DMS 410. Abdominal Sonography.
(2-0-2); I.
Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 412A, 416A, 418, 420 and 430. Restriction: admission into the diagnostic medical sonography program. A study of abdominal organs and superficial structures with emphasis on examination protocols, image production and evaluation, normal and pathologic interpretation and relation of laboratory values to pathologic conditions. Four hours of didactic instruction per week for the
first eight weeks of the semester.

DMS 412A. Scanning Techniques II.
(0-2-1); I.
Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 418, 420 and 430. Restriction: admission into the diagnostic medical sonography program. Applied principles of sonographic procedures such as abdomen, superficial structures, and fetal measurements in a dedicated laboratory setting. Emphasis is on examination protocols, equipment operation, and clinical application. Four hours of laboratory experience per week for the first eight weeks of the semester.

DMS 416A. Scanning Techniques III.
(0-2-1); I.
Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 418, 420 and 430. Restriction: admission into the diagnostic medical sonography program. Applied principles of genitourinary sonography and introductory physics in a dedicated laboratory setting. Emphasis is on examination protocols, instrument controls, and clinical applications. Four hours of laboratory experience per week for the first eight weeks of the semester.

DMS 418. Genitourinary Sonography.
(2-0-2); I.
Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 416A, 420 and 430. Restriction: admission into the diagnostic medical sonography program. A study of genitourinary sonography with emphasis on examination protocols, image production, and evaluation, normal and pathological interpretation and relation of laboratory values to pathologic conditions. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 420. Sonographic Physics & Instrumentation I.
(2-0-2); I.
Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 416A, 418 and 430. Restriction: admission into the diagnostic medical sonography program. The introductory study of sonographic physics and instrumentation with emphasis on sound wave concepts, beam patterns, transducers, pulsed echo instrumentation and image storage and display. Didactic content will be applied in corequisite scanning sessions. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 426A. Scanning Techniques IV.
(0-2-1); II.
Prerequisites: DMS 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 428, 438, 441, 442A, 450 and RSCI 499C. Restriction: admission into the diagnostic medical sonography program. Applied principles of sonographic procedures of the reproductive organs in the gravid state. Emphasis is on examination protocols, equipment operation, and scanning techniques. Four hours of laboratory experience per week for the first eight weeks of the semester.

DMS 428. Obstetrical Sonography.
(2-0-2); II.
Prerequisites: DMS 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 426A, 438, 441, 442A and 450. Restriction: admission into the diagnostic medical sonography program. A study of sonographic techniques for evaluating the reproductive organs in the gravid state, including the role of the diagnostic medical sonographer in fetal assessment of normal and abnormal conditions. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 430. Sonography Internship I.
(0-2-4); I.
Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 416A, 418 and 420. Restriction: admission into the diagnostic medical sonography program. Clinical application of technical and professional aspects of diagnostic sonography in a healthcare setting with emphasis on performance of areas such as gynecology, abdomen, and superficial anatomy. Eight hours of clinical experience per week for the first eight weeks. Forty hours of clinical experience per week for the second eight weeks of the semester.

DMS 438. Selected Topics in Sonography.
(2-0-2); II.
Prerequisites: DMS 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 426A, 428, 441, 442A and 450. Restriction: admission into the diagnostic medical sonography program. A study of advanced sonographic techniques including topics such as contrast media, physician-guided procedures, and evaluation of the musculoskeletal system. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 441. Sonographic Physics & Instrumentation II.
(2-0-2); II.
Prerequisites: 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 426A, 428, 438, 441 and 450. Restriction: admission into the diagnostic medical sonography program. The advanced study of sonographic physics and instrumentation with emphasis on Doppler instrumentation, spectral analysis, color flow imaging, image characteristics and artifacts, quality assurance, bioeffects and safety considerations. Didactic content will be applied in corequisite scanning sessions. Four hours of didactic instruction per week for the first eight weeks of the semester.

DMS 442A. Scanning Techniques V.
(0-2-1); II.
Prerequisites: DMS 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 426A, 428, 438, 441 and 450. Restriction: admission into the diagnostic medical sonography program. Applied principles of the advanced study of sonographic physics and instrumentation with emphasis on Doppler instrumentation, spectral analysis and color flow imaging in a dedicated laboratory setting. The student will also gain experience in developing a quality assurance program for an ultrasound department. Four hours of laboratory experience per week for the first eight weeks of the semester.

DMS 450. Sonography Internship II.
(0-2-4); II.
Prerequisites: DMS 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 426A, 428, 438, 441 and 442A. Restriction: admission into the diagnostic medical sonography program. Clinical application of technical and professional aspects of diagnostic sonography in a healthcare setting which continue to build on experiences obtained in preceding sonography courses. Eight hours of clinical experience per week for the first eight weeks. Forty hours of clinical experience per week for the second eight weeks of the semester.
ECON 201. Principles of Macroeconomics.  
(3-0-3); I, II, III.  
A study of the principles of consumer and firm behavior within a capitalistic price-market system. It examines the manner of production, factor markets, and degrees of competition. Also, the effects of government regulation and market intervention are analyzed.

(3-0-3); I, II, III.  
A study of the principles of consumer and firm behavior within a mixed price-market economic system.

ECON 300. Quantitative Methods in Business and Economics.  
(3-0-3); I, II, III.  
Prerequisites: ECON 202, MATH 152, 354, or equivalent. A study of mathematical applications as used in business when analyzing data. Equates with MNGT 300.

ECON 301. Economic History of the United States.  
(3-0-3); I, II.  
A study of the economic forces and institutions directly responsible for the development of the United States as a major economic power. The economic transformation of the United States from an agricultural to an industrial-service nation. Problems of income distribution, labor-technology interaction, and mixed capitalism.

ECON 302. Labor Economics.  
(3-0-3); on demand.  
Prerequisite: ECON 101 or higher. Labor management relations, the labor movement, labor legislation, government control and regulation, economic inequality, standards of living, and industrial conflicts.

(3-0-3); on demand.  
Prerequisite: ECON 101 or higher. A study of influential theories of the major economic systems: Capitalism, Marxism, and Communism. Descriptive analysis of the operation of the corresponding economies.

ECON 339. Cooperative Education III.  
(1 to 8 hrs.); on demand.  
Prerequisite: consent of departmental cooperative education coordinator required. Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (ECON 339/439) available for option credit.

ECON 341. Public Finance.  
(3-0-3); on demand.  
Prerequisite: ECON 101 or higher. Public expenditures; public revenue; taxation; public credit; financial administration of government.

ECON 342. Money and Banking.  
(3-0-3); on demand.  
Prerequisite: ECON 101 or higher. Origin, development and functions of money; banking functions and processes; the Federal Reserve System and monetary policy. Equates with FIN 342.
(3-0-3); on demand. 
Prerequisites: ECON 202 and any one of the following: MATH 123, MATH 131, MATH 133, MATH 141, MATH 152, MATH 174 or MATH 175. Analysis of the behavior of the household and the firm, with emphasis on the role of prices in allocating resources, organizing production, and distributing goods and services.

ECON 351. Intermediate Macroeconomics.  
(3-0-3); on demand. 
Prerequisite: ECON 201. This course examines and explains, at the intermediate level, what determines the level of output in the economy and the rate of growth in the level of output, as well as the factors that determine the unemployment rate, the price level, the rate of inflation, the interest rate, and foreign exchange rates. In addition, it examines the effects of government policies, especially monetary and fiscal policy, on the above factors.

ECON 389. Honors Seminar in Economics.  
(3-0-3); on demand. 
Prerequisite: membership in University Honors Program. Analysis of contemporary economic problems and policy alternatives. Topics may vary each semester.

ECON 399. Selected Workshop Topics.  
(1 to 4 hrs.); on demand. Workshops on various economic subjects will be presented periodically to supplement the basic course offerings in economics. Credit toward degree programs must be approved by the student's advisor and the department chair.

ECON 401. Environmental Economics.  
(3-0-3); on demand. 
Prerequisite: ECON 101 or higher. Analysis of the economic reasons contributing to environmental degradation and exploration of economic policies to reduce this problem.

ECON 403. Urban and Regional Economics.  
(3-0-3); on demand. 
Prerequisite: ECON 101 or higher. Analysis of location patterns, land use, urban and regional structure and growth, and development strategies. Emphasis is placed on contemporary problems and possible solutions.

ECON 410. History of Economic Thought.  
(3-0-3); on demand. 
Prerequisite: ECON 101 or higher. The origin and development of economic theories from the Mercantilist through modern times.

ECON 439. Cooperative Education IV.  
(1 to 8 hrs.); on demand. 
Prerequisite: consent of departmental cooperative education coordinator required. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level status. Maximum of three hours of cooperative education credit (ECON 339/439) available for option credit.

(3-0-3); on demand. 
Prerequisite: ECON 101 or higher. International trade theory, international monetary relationships, and the balance of payments. Emphasis is placed on contemporary problems and possible solutions. Equates with IST 447.

ECON 455. Economic Development and Growth.  
(3-0-3); on demand. 
Prerequisite: ECON 101 or higher. Classical and modern theories of growth and development and their application in both advanced and underdeveloped nations.

ECON 456. Introduction to Econometrics.  
(3-0-3); on demand. 
Prerequisite: ECON 300 or consent of instructor. Application of statistical methods to economic and managerial theories. These methods are used to both test the theories with observed data and to estimate the nature and strength of the relationship predicted by the theories.

ECON 476. Special Problems in Economics.  
(1 to 3 hrs.); on demand. 
Prerequisites: completion of 21 hours in economics and finance combined and prior consent of department chair. This course is an independent study of economic problems of special interest. Students must present in writing a suggested problem and justification for the study prior to registration. Each request will be considered on its own merit in relation to the special needs of the student.

EDAH - Education (Adult and Higher) Courses

EDAH 094. ACT Preparation.  
(1-0-1); I, II. 
Prerequisite: must be full time with an ACT score under 21. This course is designed to help MSU students enhance standardized test-taking skills and remediate academic deficiencies in order to improve ACT scores. Individualized tutorials outside of class time will be a significant part of the course.

EDAH 102. Study Skills.  
(1-0-1); I, II, each nine-week period. 
Course is designed to provide special training in the skills and techniques necessary for college level study.

EDAH 199. Selected Topics.  
(1 to 3 hrs.); I, II, III. 
Investigation of specific problem areas in the field of study. May be repeated in additional subject areas.

EDAH 299. Selected Topics.  
(1 to 3 hrs.); on demand. 
Workshop for specifically designated task orientation in education. May be repeated in additional subject areas.
EDEC - Education (Early Childhood) Courses

EDEC 125. Introduction to the Early Childhood Profession. 
(3-0-3); I, II, III.
A focus on the principles of child growth and development from birth through age five; it will explore techniques for observing and recording children’s behavior, strategies to manage an effective program operation, and maintaining a commitment to professionalism. This course is only open to those in the Child Development Associate Program (CDA).

EDEC 150. Skills for Preschool Teachers. 
(3-0-3); I, II, III.
A study of skills needed by teachers of children ages birth to five that will promote the physical, intellectual, social, and emotional development of young children. This course is only open to those in the Child Development Associate Program (CDA).

EDEC 199. Workshop. 
(1 to 3 hrs.); on demand.
Workshop for specifically designated task orientation in early childhood education. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

(2-2-3); I.
Prerequisite: EDF 207 or instructor approval. Behavioral characteristics in growth and development; positive approach to child guidance; importance of the role of parents and child care givers. Directed practicum in observation of preschool children.

EDEC 254. Preschool Administration. 
(3-2-4); I.
The study of the organization and administration of preschool programs; role of parenthood education; supervised experiences in planning and guiding children’s activities in a preschool program. Completion of the required field experience is an integral part of this course.

EDEC 255. Assessment of Young Children. 
(3-1-3); I.
Prerequisite: EDEC 253. An introduction to formal and informal assessment techniques to be used with young children (0-5). This course includes assessment of all developmental domains for children with and without disabilities. Completion of the required field experience is an integral part of this course.

EDEC 276. Independent Study. 
(1 to 3 hrs.); I, II.
Directed study of specific areas in early childhood education. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDEC 399. Workshop. 
(1 to 3 hrs.); on demand.
Continuation of EDEC 199.

EDEC 416. Infant/Toddler Program Planning. 
(3-1-3); I.

EDEC 418. Preschool Program Planning. 
(3-1-3); I.
Prerequisites: EDEC 253, EDEE 305 and IECE 311. The research and study of early childhood development curriculum models, activities, plans and implementation of programs in a variety of environments. Completion of the required field experience is an integral part of this course.

EDEC 425. Early Childhood Practicum. 
(9 hrs.); I, II, III.
Prerequisites: IECE 301, IECE 345, EDEC 416 and EDEC 418. Corequisite: EDEC 499C. Restriction: senior status in an Early Childhood Development. Placement in an early childhood setting on the basis of one week placement for each credit hour. Observation, participation, teaching conferences with supervisor, cocurricular activities and conferences with supervising teacher are required. If necessary, students may continue this experience over two consecutive semesters.

EDEC 470. Research Problems. 
(1 to 3 hrs.); I, II.
Directed research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDEC 499C. Senior Seminar. 
(3-0-3); I, II, III.
Corequisite: EDEC 425. Restriction: senior status in Early Childhood Development. Orientation for transition from the role of student to the role of professional and further understanding of the role of professionals in the field of early care and education. Seminar discussion format is used. If necessary, students may continue this experience over two consecutive semesters. This course satisfies the integrative component for general education.

EDEE - Education (Early Elementary/P-5) Courses

(3-0-3); I, II.
Prerequisites: EDF 207 and either EDF 211 or EDEC 253. A comprehensive study of contemporary developments in the field of early elementary education including the applications of learning theories to classroom practices; the historical and philosophical origins of current curricular content and practices in early education; and an examination of research findings; study of the impact of familial, economic, and social factors on school performance of learners in the P-5 range. Field experience in P-5 are an integral part of this course.

EDEE 321. Teaching Math in Early Elementary Grades. 
(2-2-3); I, II.
Prerequisite: MATH 231. Corequisites: SCI 490 and EDUC 482.
EDEE 322. Teaching Social Studies in the Early Elementary Grades.
(2-2-3); I, II.
Prerequisites: EDEM 330 and TEP admission. Corequisites: EDEE 323 and EDEE 331. This course will explore the scope and sequence of understandings, attitudes, and skills taught in early elementary social studies programs; and will examine various methodologies used in the early elementary grades of P-5. Field experiences in P-5 are an integral part of this course.

EDEE 323. Language Arts for Early Elementary.
(2-2-3); I, II.
Prerequisites: EDEE 327 and EDEM 330. Corequisites: EDEE 323 and EDEE 331. Requires TEP admission. Role of language arts in the early elementary curriculum. Diagnosis of children’s communication skills, needs, and subsequent teaching techniques are central to the course. Areas of emphasis include language development, listening and thinking skills, speaking, written expression, spelling, and handwriting. Field experience is an integral part of this course.

EDEE 327. Literature and Materials for Young Readers.
(3-0-3); I, II.
Prerequisites: EDEE 305. A survey of children’s literature from oral tradition through contemporary times, including all types of literature and media appropriate for Early Elementary P-5. Emphasis is on criteria for evaluation, selection, and use of books and materials as related to the developmental needs and interests of children. Completion of the required field experience is an integral part of this course.

EDEE 331. Reading for Early Elementary Teachers.
(2-2-3); I, II.
Prerequisite: EDEM 330. Corequisites: EDEE 322 and EDEE 323. Requires TEP admission. Material and methods of teaching basic reading skills in grades P-5. Students are taught how to teach sub-skills of reading readiness, vocabulary development, comprehension, and study skills. Assessment and interpretation of reading abilities will be utilized in designing classroom instruction. Field experiences in P-5 are an integral part of this course.

EDEE 423. Supervised Student Teaching Practicum.
(4 to 12 hrs.); I, II.
Prerequisite: completion of requirements for admission to the professional semester. Student is assigned to student teaching center during which time observation, participation, and student teaching are done. The student teaching must be done in nonadjacent grades splitting the six-week period between two of the grades. Special conferences with supervising teacher, attendance, and participation in faculty meetings and out-of-school activities required.

EDEL - Education (Elementary) Courses

EDEL 096. Strategic Reading I.
(3-0-3); I, II.
Developmental reading course for students whose ACT enhanced reading score identifies them as needing readiness course work at the Reading I level. Information about the college readiness standards can be found on Morehead State University’s Developmental Education web site. Course provides diagnostic comprehension, and reading rates are stressed.

EDEL 097. Strategic Reading II.
(3-0-3); I, II.
Developmental reading course for students who have completed EDEL 096 with a grade of “C” or better, or whose ACT enhanced reading score identifies them as needing readiness course work at the Reading II level. Information about the college readiness standards can be found on Morehead State University’s Developmental Education web site. Course provides diagnostic comprehension, and reading rates are stressed.

EDEL 112. Reading English as a Second Language.
(2-2-3); on demand.
Individualized program for teaching vocabulary and reading skills to the non-English speaking student.

EDEL 199. Workshop.
(1 to 3 hrs.); on demand.
Workshop for specifically designated task orientation in elementary education. Maximum of six semester hours may be earned under this course number.

EDEL 250. Practicum.
(3 to 6 hrs.); I, II, III.
Students will demonstrate competency in skills necessary to nurture and promote children’s physical, social, emotional, and intellectual growth in a child development framework. Experiences include placement with children from birth to age five in either a classroom or simulated classroom laboratory. This course is open only to those candidates enrolled in Child Development Program training.

EDEL 276. Independent Study.
(1 to 3 hrs.); I, II.
Directed study of specific areas in elementary education. Topic must be approved in advance by instructor. Conferences with instructor by arrangement.

EDEL 302. Integrating Technology into the Classroom.
(3-0-3); I, II.
Corequisites: P-5 - EDSP 367 & EDEM 330; 5-9 - EDMG 347 & EDMG 330. Focus on the principles of instructional technology and the appropriate integration of technology into the classroom for both teaching and learning. Production projects will be required. Completion of the required field experience is an integral part of this course.

EDEL 333. Fundamentals of Elementary Education.
(3-1-4); on demand.
Prerequisites: admission to TEP and approval of department chair. Introduction to content areas of the elementary curriculum, in-
cluding teaching methods and materials. Emphasis is placed on the role of special teachers in the total school program.

**EDEL 470. Research Problems.**
*(1 to 3 hrs.)*; I, II.
Independent research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

**EDEM - Education (Early Elementary and Middle Grades) Courses**

**EDEM 330. Foundations of Reading.**
*(2-2-3)*; I, II.
Prerequisites: EDF 207, EDF 211, EDSP 230 and EDEE 305.
Corequisites: EDEL 302 and EDSP 367. Must have completed 24 semester hours. (Orientation/Exploration, Preparation Level Industrial Education students are exempt from prerequisites not required in their program). An explanation of the developmental aspects of the reading process in grades P-9 in terms of instruction, assessment, materials, and classroom organization. Completion of the required field experience is an integral part of this course.

**EDEM 499C. Seminar in Effective Teaching.**
*(3-1-3)*; I, II.
Corequisite: Enrollment in one of the following: EDEE 423, EDMG 446, EDSP 435, EDSP 437, IECE 425. A critical exploration, analysis, and implementation of the knowledge, skills, and dispositions needed to effectively teach all students. This is a web-supported course, including both face-to-face and online instruction. This course satisfies the integrated component for general education.

**EDF - Education (Foundations) Courses**

**EDF 207. Foundations of Education.**
*(3-0-3)*; I, II, III.
Orientation for students considering teaching as a career. Course will survey the scientific, historic, philosophic, political and social foundations of the teaching profession. Field experiences are an integral part of course.

**EDF 211. Human Growth and Development.**
*(3-0-3)*; I, II, III.
Survey of developmental patterns from birth to adolescence and their implications for improving the quality of life for the community of lifelong learners. Eight hours of field experience (observation and participation) is required and is a foundational element of the course.

**EDF 311. Learning Theories and Assessment in Education.**
*(3-0-3)*; I, II.
Prerequisites: admission to TEP and EDF 211. Theories, principles, and concepts of human development, learning, motivation, and assessment are presented and applied to the interpretation and explanation of human behavior in relation to classroom practices and the teaching profession. Twelve hours of field experience (observation) in a school or other educational agency is required and is a foundational element of the course.

**EDF 322. Gender and Education.**
*(3-0-3)*; I.
This course explores gender issues that affect male and female students from preschool to postsecondary education. Equates with WST 322.

**EDF 360. History of Education.**
*(3-0-3)*; on demand.
Education in ancient, medieval, and modern periods; early American backgrounds; early campaigns for improvement of instruction and teacher training; development of present practices; great educators of each period and their contributions.

**EDF 364. The Black Family.**
*(3-0-3)*; on demand.
This course focuses on the impact of historical events including slavery, emancipation, reconstruction and the civil rights movement on the structure and function of the African-American family. Historical perspective, cultural heritage, public policy, education and social formations will be included in this interdisciplinary survey.

**EDGC - Education (Guidance and Counseling) Courses**

**EDGC 105. Career Planning.**
*(2-0-2)*; I, II.
Systematic information and guidance in career development provided which assists the student in making a realistic career decision consistent with needs, abilities, attitudes, and personal goals.

**EDMG - Education (Middle Grades/5-9) Courses**

**EDMG 306. Development and Learning in Middle Grades.**
*(3-0-3)*; I, II.
Prerequisites: EDF 207 and 211. A study of the principles of learning and motivation as they are applied in the middle grades. Completion of the required field experience is an integral part of this course.

**EDMG 330. Foundations of Reading for Middle Grades.**
*(2-3)*; I, II.
Prerequisites: admission to TEP and EDF 207, 211, EDMG 306. An explanation of the developmental aspects of the reading process with particular emphasis on grades 5-9 skills and strategies needed for school and lifelong reading and learning. Included are instructional, assessment, materials, and management as they pertain to middle grades reading instruction. Completion of the required field experience is an integral part of this course.

**EDMG 332. Teaching Reading in the Middle Grades Content Areas.**
*(3-0-3)*; I, II.
Prerequisites: admission to TEP and EDF 207, 211, EDMG 330. (Orientation/Exploration, Preparation Level Industrial Education
and Vocational Family and Consumer Science students are exempt from prerequisites not required in their program. EDEM 330 is a prerequisite for all students.) An explanation and evaluation of materials and methods of teaching the advanced reading skills in grades 5-9. The students are taught how to teach the skills needed for comprehension, study skills, and content area reading. Assessment and interpretation of reading abilities will be utilized to design classroom instruction. Completion of the required field experience is an integral part of this course.

EDMG 341. Teaching Math in Middle Grades. (3-0-3); I.
Corequisites: admission to TEP and EDMG 330, MATH 231 and 232. Presentation of essential number concepts for middle grade learners with emphasis upon functional arithmetic and its application. The course will examine various methodologies used in the middle grades. Completion of the required field experience is an integral part of this course.

EDMG 342. Teaching Social Studies in Middle Grades. (3-0-3); I.
Prerequisites: admission to TEP and EDMG 330. Course will explore the scope and sequence of understandings, attitudes, and skills taught in middle grade social studies programs; and will examine various methodologies used in the middle grades. Completion of the required field experience is an integral part of this course.

EDMG 343. Teaching Language Arts in Middle Grades. (3-0-3); I.
Prerequisites: admission to TEP, EDMG 330, EDSP 230, EDMG 306 and 347. Role of language arts in the middle grades curriculum. Diagnosis of children’s communication skills, needs, and subsequent teaching techniques are central to the course. Areas of emphasis include language development, listening and thinking skills, speaking, written expression, spelling, and handwriting. Completion of the required field experience is an integral part of this course.

EDMG 347. Literature and Materials for the Middle Grades. (3-0-3); I, II.
A survey of literature for the middle grades in which students will examine materials across the different genres as well as various types of media appropriate for levels of certification in grades 5-9. Emphasis on criteria for evaluation and selection of materials, reading interest, needs, and abilities of preadolescence. Completion of the required field experience is an integral part of this course.

EDMG 446. Supervised Student Teaching. (4 to 12 hrs.); I, II.
Prerequisite: completion of requirements for admission to the professional semester. Placement in a student teaching center during which time observation, participation, and student teaching are done. Special conferences with the supervising teacher, attendance, and participation in faculty meetings and co-curricular activities are also required.

EDMG 470. Directed Research/Directed Study. (1 to 3 hrs.); on demand.
An independent study providing students opportunities to work independently with a faculty member. The content of the course is dependent upon the student needs and must be approved by the faculty member and department chair.

EDSE - Education (Secondary) Courses

EDSE 276. Independent Study. (1 to 3 hrs.); I, II.
Directed study of specific areas in secondary education. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDSE 312. Educational Methods and Technology. (2-2-3); I, II.
Prerequisite: admission to TEP. Introduction to classroom teaching skills and methods. The instructional process is covered with emphasis upon lesson preparation and presentation, including mediation of instruction; long-term and short-term instructional planning; human interaction skills. Completion of the required field experience is an integral part of this course.

EDSE 333. Field Experiences in Secondary Classrooms. (1-1-2); I, II.
Prerequisite: admission to TEP. The course provides students with opportunities to develop the pedagogical knowledge and skills required to perform successfully the tasks of planning, implementing, and evaluating instruction.

EDSE 399. Selected Topics. (1 to 3 hrs.); I, II.
Investigation of specific problem areas in the field of study. May be repeated in additional subject areas.

EDSE 416. Clinical Practice. (12-0-12); I, II.
This integrated professional clinical experience is comprised of two parts: 1) A seminar component, and 2) A public school classroom component. Eligible teacher candidates must successfully complete all aspects of this course as determined by state, university, an assigned university supervisor and public school cooperating teacher.

EDSE 470. Research Problems. (1 to 3 hrs.); I, II.
Independent research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

EDSE 483. Classroom Organization and Management for Secondary Teachers. (3-0-3); I, II.
Prerequisite: admission to TEP. Designed to provide assistance in establishing organized, well managed regular classrooms, labs, and other settings in secondary schools (8-12). Emphasis is placed upon developing procedures, adaptations, and rules for class organization and management. Various models of classroom management will be studied and options for dealing with disruptive students will be described. Completion of the required field experience is an integral part of this course.

EDSE 499C. Teacher in Today’s Schools. (2-0-2); I, II.
Prerequisite: admission to professional semester. An application of previous learning in development of an instructional unit taught during student teaching; an orientation to student teaching experience; miscellaneous activities relating to areas of teacher concerns, i.e., school law, pupil accounting, professional organizations, principles of classroom organization and management; and human interaction skills. Field experiences are an integral part of this course. This course satisfies the integrative component for general education.

EDSP - Education (Special) Courses

EDSP 199. Workshop. (1 to 3 hrs.); on demand.
Workshop for specifically designated task orientation in special education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

EDSP 230. Education of Exceptional Children. (3-0-3); I, II.
Procedures for identification, education, and treatment of exceptional children — the gifted, those with low intelligence, and handicapped — including behavioral deviations. Completion of the required field experience is an integral part of this course.

EDSP 231. Field Experiences. (0-2-1); I.
Involves the student in on-site experiences in a variety of schools, institutions, and agencies providing services to the trainable mentally handicapped.

EDSP 276. Independent Study. (1 to 3 hrs.); I, II.
Independent study of a professional problem in special education.

EDSP 320. Introduction to Corrective Speech. (3-0-3); I, II, III.
Introductory course in speech correction for classroom teacher.

EDSP 350. Intellectual and Developmental Disabilities. (2-2-3); I, II.
Prerequisite: EDSP 230. Biological, physical, etiological, psychological, and educational characteristics of individuals with intellectual and developmental disabilities. The likely needs of these individuals discussed in light of their underlying conditions. Completion of the required field experience is an integral part of this course.

EDSP 353. Language Arts Teaching LBD. (2-2-3); II.
Prerequisites: admission to TEP, EDEM 330, EDSP 230, EDSP 350, EDSP 356, EDSP 360, EDSP 363 and EDSP 367. Designed to prepare the teacher of students with learning and behavior disorders in curriculum development and specialized procedures for teaching language arts, including reading, spelling, handwriting, language, and written composition. Level III field experience is integral to this course.

EDSP 355. Teaching Students with LBD. (2-2-3); I.
Prerequisites: admission to TEP and EDSP 230, EDSP 350, EDSP 356, EDSP 360 and EDSP 367; Corequisite: EDSP 359. This course is designed to train teachers in instructional planning, management, and delivery of instruction. It includes strategic program planning incorporating due process procedures as specified in federal legislation, as well as systematic teaching methodology in learning disabilities, behavioral disorders and mild disabilities in public schools. The course also addresses classroom management and organization practices as they pertain to establishing optimal learning environments for all students. Level III field experience for this course completed in corequisite practicum.

EDSP 356. Applied Behavior Analysis. (2-2-3); I, II.
Prerequisites: EDSP 230 and 350 or consent of the instructor; (for students in MSD program, this is part of the methods block and all block courses must be taken concurrently). Provides students with an introduction to applied behavior analysis procedures. The design and implementation of specific strategies that will support the establishment of effective instructional environments will be examined. Topics will include behavior management and training strategies, data-based programming, and field-based teacher research methods. Completion of the required field experience is an integral part of this course.

EDSP 357. Math and Content Teaching LBD. (2-2-3); II.
Prerequisite: EDSP 230, 350, 356, 360, 367 and 372. This course is designed to train teachers in the areas of Learning Disabilities and Behavior Disorders in curriculum development and modification, and in the planning, implementation, and evaluation of specially designed instruction, as required on a students’ Individual Education Program, in mathematics, content areas, and social-emotional skills. Level III field experience is integral to this course.

EDSP 359. Practicum in Teaching for Students with LBD. (0-2-1); I, II.
Corequisite: EDSP 355. This practicum is designed to provide trainee teachers with supervised experience in instructional planning, management, and systematic delivery of specially designed instruction for individuals with learning disabilities, behavior disorders, and mild mental disabilities in public schools.

EDSP 360. Characteristics of Individuals with Learning Disabilities and Behavior Disorders. (2-2-3); I, II.
Prerequisite: EDSP 230 or appropriate introductory course. Biological, physical, etiological, psychological, and educational characteristics of individuals demonstrating significant deviations in learning and behavior disorders. The likely needs of learning disabled and behavior disordered individuals discussed in light of their presenting problems. Completion of the required field experience is an integral part of this course.

EDSP 363. Assistive Technology. (3-1-3); II.
Prerequisites: EDSP 230 and 350. This course develops basic knowledge and skills using assistive technology as a fundamental resource and support for people with disabilities. It is focused on the needs of the beginning professional in education or other human service fields. Legal mandates, funding sources, information resources, the range of available devices and software will
be examined. Completion of the required field experience is an integral part of this course.

**EDSP 365. Including Students with Diverse Needs in the Classroom.**
(2-2-3); I, II.
Prerequisite: EDSP 230 and admission to the TEP. Corequisite: either EDEE 321 or 331. This course will develop the skills and information needed by teachers to build inclusive learning communities within the schools. Crucial to achieving this end is: 1) the development of the skills needed to work with colleagues to create a classroom environment that accommodates the full range of diversity found in today’s schools, and 2) a working knowledge of the legal requirements related to meeting the needs of diverse students. Completion of the required field experience is an integral part of this course.

**EDSP 367. Educational Assessment.**
(2-2-3); I, II.
Prerequisite: EDSP 230, EDEE 305 or EDMG 306. Corequisites: EDEL 302 and EDEM 330. The purpose of the course is to train teachers to appropriately select, use, and interpret a variety of valid educational assessment instruments, both standardized and informal, in the following areas: initial identification of individuals with disabilities, instructional planning, monitoring of student progress, and in the evaluation of student performance and program effectiveness. Completion of the required field experience is an integral part of this course.

**EDSP 370. Transdisciplinary Assessment of Students with Moderate and Severe Disabilities.**
(3-0-3); II.
Prerequisite: EDSP 350 or consent of instructor. Corequisite: EDSP 371. Involves procedures for comprehensive assessment of the educational need of individuals with moderate to severe disabilities including teaming with related services personnel, parents, and others to design and implement an appropriate individual instructional program.

**EDSP 371. Field Experiences in Transdisciplinary Assessment and Services for Students with Moderate and Severe Disabilities.**
(0-2-1); II.
Prerequisite: EDSP 350 or consent of instructor. Corequisite: EDSP 370. This field placement in programs serving students with moderate and severe disabilities will provide the student with an opportunity to understand the relevant characteristics of this group, understand the roles of various personnel working with these students, and apply the assessment strategies being studied in the corequisite course.

**EDSP 372. Transition to Adult Life.**
(3-2-3); I, II.
Prerequisites: EDSP 230 and 350. Prepares teachers of students with moderate and severe disabilities to effectively plan for and support students moving from school to adult life. This entails skill development in the area of planning processes, vocational training, support development, developing functional skills and preparation of Individualized Transition Plans (ITPs). Completion of the required field experience is an integral part of this course.

**EDSP 373. Curriculum for Students with Moderate and Severe Disabilities.**
(3-0-3); I.
Prerequisites: EDSP 350 and 370 and admission to the TEP. This course is part of the MSD block and all block courses must be taken concurrently. Examines the components of functional curriculums for students with moderate and severe disabilities. Also examines strategies to manage a program of community-based instruction, to support the inclusion of students with moderate and severe disabilities in a variety of school and community settings and to conduct authentic assessment of student learning. Completion of the required field experience is an integral part of this course.

**EDSP 374. Teaching Students with Moderate and Severe Disabilities.**
(3-1-3); I.
Prerequisite: admission to TEP, EDSP 350, 370, or consent of instructor. This course is part of the MSD block and all block courses must be taken concurrently. Examines the critical components of an effective educational program for students with moderate and severe disabilities including the development of Individual Education Plans (IEPs), techniques for effective instruction, strategies for behavior management, approaches to systematic data based instruction, collaboration with families, and interdisciplinary collaboration.

**EDSP 375. Practicum in Education of Students with Moderate and Severe Disabilities.**
(0-4-2); I.
This course is part of the MSD block and all block courses must be taken concurrently. Field placement in programs serving students with moderate and severe disabilities will provide the student with an opportunity to understand the physically, behaviorally, and educationally relevant characteristics of this group and apply planning and teaching strategies being studied in the corequisite course.

**EDSP 399. Workshop.**
(1 to 3 hrs.); on demand.
Workshop for specifically designated task orientation in special education. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

**EDSP 435. Supervised Teaching Practicum.**
(4 to 12 hrs.); I, II.
Prerequisites: admission to TEP, attainment of scholastic standing of 2.5 on residence courses at MSU, minimum standing of 2.5 on all work completed in area of concentration, major(s), and minor(s), minimum of one semester residence, and approval of the University Teacher Education Council. Placement is in public school special education and elementary education classrooms on the basis of one-week placement for each credit hour unit. Application made through coordinator of professional laboratory experiences.

**EDSP 437. Student Teaching Practicum in Education of Students with Moderate and Severe Disabilities.**
(6 to 12 hrs.); I, II.
Prerequisites: admission to TEP, attainment of 2.5 GPA on residence courses at MSU, 2.5 GPA on all work in area(s) of concentration, major(s), and minor(s), minimum of one semester residence,
Prerequisite: ACT score in English of 13 or below. A placement test is required. Field placement in a program serving people with disabilities with accompanying tutorials. Provides student with opportunity to effectively integrate knowledge and skill during a 120 hour placement in a service setting.

(1 to 3 hrs.); I, II.
Independent research study of a professional problem. Conferences with instructor by arrangement.

EDUC - Education (Professional) Courses

(3-0-3); I, II.
An introduction to educational computing through lecture and directed hands-on computer activities. The course will focus on the computer as a tool for educators. No previous computer experience required.

EDUC 476. Reading in the Secondary School.
(2-2-3); I, III.
Prerequisite: admission to TEP. Emphasis is centered around instruction in junior high and high school. Materials are included for instruction and studies of administrative problems involved. Field experiences are an integral part of this course.

EDUC 482. Classroom Management and Assessment.
(2-2-3); I, II.
Prerequisite: EDEM 330. Corequisites: SCI 490 and EDEE 321 and TEP admission. Designed to provide assistance in establishing an organized, well managed classroom in grades P-9 and to develop an understanding of educational assessment terms and methods. Field experience in P-5 is an integral part of this course and is required.

ENG - English Courses

ENG 090. Developmental Writing.
(3-0-3); I, II, III.
Prerequisite: ACT score in English of 13 or below. A placement composition course that reviews basic grammar, punctuation, and mechanics and emphasizes writing/revising for clarity and correctness. ENG 090 does not satisfy the general education requirement for written composition. ENG 090 does not count as hours toward degree.

ENG 099. Basic Writing Skills.
(3-0-3); I, II, III.
Prerequisite: ACT score in English of 14-17 or successful completion of ENG 090. This course is designed to provide students with an intensive opportunity to develop entry-level writing skills of critical importance in ENG 100 — specifically, a basic ability to read, write, and reason analytically as well as to incorporate and document basic research into one’s own writing. ENG 099 does not satisfy the general education requirement for written composition. ENG 099 does not count as hours toward degree.

ENG 100. Writing I.
(3-0-3); I, II, III.
Prerequisite: ACT score of 18 in English or successful completion of ENG 099. This course is designed to help students understand and develop their writing, reading, and thinking abilities through the production and rhetorical examination of personal and academic texts. This course satisfies the required core-writing I for general education.

ENG 120. Approaches to Literature.
(3-0-3); I, II, III.
Prerequisites: an ACT score of 18 in English and in reading or a grade of "C" or better in ENG 099 and EDEL 097. Introduction to a variety of literary traditions around the world, with emphasis on ways of reading and understanding literary texts. This course will cover works in three major literary genres (poetry, drama, and fiction) and works from at least three national groups outside Britain and America. This course satisfies the HUM I requirement for general education.

ENG 200. Writing II.
(3-0-3); I, II, III.
Prerequisites: ENG 100 Builds on skills learned in ENG 100 by leading students to analyze and write critically about readings that are related to one of the area studies within general education. This course satisfies the core-writing II requirement for general education.

ENG 205. Language: Culture and Mind.
(3-0-3); I, II.
Introduction to the study of human language. Topics include language and culture, language and the mind, meaning and communication, the acquisition of language, and sound and writing systems. This course satisfies the HUM II requirement for general education.

ENG 211. Introduction to World Literature I.
(3-0-3); I.
Prerequisites: an ACT score of 18 in English and in reading or a grade of "C" or better in ENG 100 and EDEL 097. A comparative study of dramatic, lyric, and narrative ancient literatures. Equates with IST 211.

ENG 212. Introduction to World Literature II.
(3-0-3); II.
Prerequisites: an ACT score of 18 in English and in reading or a grade of "C" or better in ENG 100 and EDEL 097. A comparative study of dramatic, lyric, and narrative literatures of the world after the 16th century. Equates with IST 212.

ENG 280. Introduction to Teaching English in Secondary Schools
(3-0-3); I.
This course familiarizes students with national and state standards for secondary language arts and provides early field experience to
explore the application of those standards in actual English classrooms. Students will also develop a beginning teaching portfolio to prepare for TEP admissions, to organize and reflect on content and methods course materials, and to accrue resources throughout clinical experiences and beyond. Field experience required.

**ENG 292. Technical Composition.**
(3-0-3); I, II.
*Prerequisites: English 100 (or its equivalent) and 24 or more credit hours completed.* English 292 builds on skills learned in English 100 with emphasis on the writing of scientific-industrial directions, letters, and memos, abstracts, minor project reports, and the use of visual aids.

**ENG 293. Introduction to Creative Writing.**
(3-0-3); on demand.
*Prerequisite: ENG 100.* Introduction to creative writing, with an emphasis on production in several genres. All sections will include at least three of the following: fiction, poetry, creative non-fiction, and drama.

**ENG 300. Introduction to Literary Studies in English.**
(3-0-3); II.
*Prerequisite: ENG 100 (or equivalent).* This course is an advanced introduction to literary studies in English. The course will focus on basic literary terminology, literary research and documentation techniques, and fundamental theoretical issues in studying literature. It is strongly recommended that students take ENG 300 before taking any upper-level literature courses.

**ENG 305. Introduction to Linguistics.**
(3-0-3); II.
Introduction to the major areas of contemporary linguistics.

**ENG 311. Global English Literature.**
(3-0-3); on demand.
*Prerequisite: ENG 100 (or equivalent).* This course is an introduction to the English language literature produced outside of a British or American literary tradition.

**ENG 315. Structure of English.**
(3-0-3); I, II.
*Prerequisite: ENG 100 or equivalent.* The structures of the English language from the perspective of descriptive and structural linguistics.

**ENG 320. Women Writers and Feminist Perspectives.**
(3-0-3); on demand.
*Prerequisite: ENG 100 or equivalent.* Women writers of the 19th and 20th centuries, their feminine vision and voice. Focus on primary works; attention given to feminist criticism in both theory and practice. Equates with WST 320.

**ENG 325. Religious Literature of the World.**
(3-0-3); on demand.
*Prerequisite: ENG 100 or equivalent.* The literature of major religions of the world. Equates with IST 325.

**ENG 331. British Literature to 1750.**
(3-0-3); I, II.
*Prerequisite: ENG 100 or equivalent.* A survey of British literature from Beowulf through Dr. Johnson.

**ENG 332. British Literature since 1750.**
(3-0-3); I, II.
*Prerequisite: ENG 100 or equivalent.* A survey of British literature from Wordsworth to the present.

**ENG 341. American Literature to 1865.**
(3-0-3); I, II.
*Prerequisite: ENG 100 or equivalent.* A survey of American literature from its colonial beginnings to the end of the Civil War.

**ENG 342. American Literature since 1865.**
(3-0-3); I, II.
*Prerequisite: ENG 100 or equivalent.* A survey of American literature from the end of the Civil War to the present.

**ENG 344. The Short Story and the Novel.**
(3-0-3); I, II.
*Prerequisite: ENG 100 or equivalent.* Study of representative forms of the short story and the novel.

**ENG 348. African-American Literature.**
(3-0-3); on demand.
*Prerequisite: ENG 100 or equivalent.* A study of African-American poets, playwrights, autobiographers, and novelists of the 19th and 20th centuries.

**ENG 360. Appalachian Literature.**
(3-0-3); on demand.
*Prerequisite: ENG 100 or equivalent.* Regional literature including selected works by such major writers of the region as Harriette Arnow, Jesse Stuart, and Wilma Dykeman.

**ENG 365. Literature of the South.**
(3-0-3); on demand.
*Prerequisite: ENG 100 or equivalent.* Readings in the major representative Southern authors.

**ENG 367. Old Testament Literature.**
(3-0-3); on demand.
*Prerequisite: ENG 100 or equivalent.* A critical study of the history and literature of the Old Testament.

**ENG 368. New Testament Literature.**
(3-0-3); on demand.
*Prerequisite: ENG 100 or equivalent.* A critical study of the history and literature of the New Testament.

**ENG 381. Teaching Literature in Secondary Schools.**
(3-0-3); I, II.
*Prerequisites: admission to TEP, completion of ENG 280, and at least six hours of 300-level literature courses.* This course focuses on preparing secondary English teaching candidates to teach literature in the high school classroom. The course covers theories of literacy appropriate to the high school classroom, research on adolescent reading development, and theories and methodologies for teaching literature to adolescents. The course will include selections not only from canonical and contemporary literature but also from Kentucky’s Core Content and Program of Studies for Literature. Students will engage in a variety of individual, small-group, and large-group activities in order to both learn and practice methods and strategies for literature instruction. Field experience required.
ENG 382. Teaching Writing in Secondary Schools.
(3-0-3); I, II.
Prerequisite: admission to TEP. A study of composition theory, research, and practice in a context of a student’s own writing. Through workshops and classroom demonstrations, students learn to apply sound writing-based instructional techniques in their secondary classrooms. The course focuses on issues related to how older adolescents develop their writing abilities and the classroom practices which facilitate that development. Field experience required.

ENG 389. Honors Seminar in Literature.
(3-0-3); on demand.
Prerequisite: ENG 100 or equivalent. Intensive analytical study of a technique, movement, theme, author, or genre. Restricted to Honors Program students.

ENG 390. Professional Writing.
(3-0-3); I, II.
Prerequisites: successful completion of the general education writing requirements, and the general education computer competency requirement. A writing-intensive course which teaches intermediate-level students the formal, rhetorical, and mechanical aspects of technical writing to prepare them for writing case reports, memoranda, technical specifications, process descriptions, and other work-related documents.

ENG 391. Advanced Expository Writing.
(3-0-3); on demand.
Prerequisite: ENG 200 or equivalent. Practice in the writing of expository prose, and long essays based on research. Equates with WST 391.

ENG 392. Teaching Writing in Elementary and Middle Schools.
(3-0-3); on demand.
Prerequisite: ENG 200 or equivalent. Study of composition theory, research, and practice in a context of a student’s own writing through workshops and classroom demonstrations.

ENG 393. History of the English Language.
(3-0-3); on demand.
Prerequisite: ENG 100 or equivalent. The major developments in the evolution of English from an early Germanic dialect to its present form.

ENG 394. Language and Society.
(3-0-3); I.
Prerequisite: ENG 100 or equivalent. Introduction to sociolinguistics. Focus on language variation and issues of language, gender, race, power, and education.

ENG 395. Poetry Writing.
(3-0-3); on demand.
Prerequisite: ENG 200 or equivalent. Instruction in poetry writing: structural principles, use of metaphor, image, detail, voice, rhythm, the line and other concerns of poetics. A writing workshop format with emphasis on poetry in the contemporary idiom.

ENG 396. Fiction Writing.
(3-0-3); on demand.
Prerequisite: ENG 200 or equivalent. Instruction in fiction writing: plot, conflict, characterization, point of view, atmosphere and other concerns of contemporary fiction. Writing workshop format with emphasis on fiction in the contemporary idiom.

ENG 397. Writing Creative Nonfiction.
(3-0-3); on demand.
Prerequisite: ENG 200 or equivalent. Instruction in writing creative nonfiction (including memoir, personal essay, autobiography, and general literary nonfiction). Topics include developing themes from subjects, dramatizing life experience, developing a voice and persona, and other concerns of contemporary creative nonfiction. Writing workshop format.

(3-0-3); on demand.
Prerequisite: ENG 100 or equivalent. This course is an introduction to the growing field of literature and sexuality studies. In particular, the course will focus on the formation of a gay and lesbian literary canon in contemporary English Studies. Equates with WST 394.

ENG 399. Special Courses.
(1 to 3 hrs.); on demand.
Prerequisite: ENG 100 or equivalent. These courses are usually specialized offerings for the undergraduate student. The purpose of these courses is to enhance the existing program in English.

ENG 400. Studies in English for Teachers.
(3-0-3); I.
Prerequisites: senior standing and admission to TEP. English 400 is designed to meet National Council of Teachers of English and Kentucky Department of Education guidelines to prepare candidates for the clinical semester in the areas of dispositions, content knowledge, pedagogy, curriculum and assessment. Field experience required.

ENG 401. Semantics.
(3-0-3); on demand.
Prerequisite: ENG 305 or 315. A linguistic approach to the study of meaning in language.

ENG 404. Linguistics: Grammar.
(3-0-3); on demand.
Prerequisite: ENG 305 or 315. Principles of grammar from current theoretical perspectives.

ENG 405. Introduction to Old English.
(3-0-3); on demand.
Introduction to the language and literature of the Anglo-Saxon period.

ENG 422. Studies in American Literature to 1900.
(3-0-3); I or II.
Prerequisite: ENG 341 or ENG 342 with a grade of "C" or better. Studies in American Literature to 1900 provides intensive appreciation and analysis of literary texts from the colonial period to 1900. Depending on the particular orientation an instructor might choose, students will learn about such movements as: 1) Romanticism and Gothicism, 2) Transcendentalism, 3) Literary Nationalism, 4) Regionalism, and/or 5) Realism.

(3-0-3); I or II.
Prerequisite: ENG 341 or ENG 342 with a grade of "C" or better. Studies in American Literature, 1900-1965 provides intensive analysis and appreciation of literary texts from the turn of the century to the onset of postmodernism. Depending on the particular orientation an instructor might choose, students will learn about such movements as: 1) Realism, 2) Naturalism, 3) Modernism, 4) The Harlem Renaissance, and/or 5) Expatriatism.

ENG 424. Studies in Contemporary American Literature. (3-0-3); I or II.
Prerequisite: ENG 341 or ENG 342 with a grade of "C" or better. Studies in Contemporary American Literature provides intensive analysis and appreciation of literary texts from 1965 to the present day. Depending on the particular orientation an instructor might choose, students will learn about: 1) postmodern literature, 2) such contemporary movements as hypertexts and e-poetry, and/or 3) the many multi-ethnic literatures currently dominating the American literary landscape.

ENG 432. The English Novel. (3-0-3); on demand.
Prerequisite: ENG 331 or 332. Development of the English novel from its beginnings to the 20th century.

ENG 435. Shakespeare. (3-0-3); II.
Prerequisite: ENG 200 or equivalent. A study of selected comedies, histories, and tragedies in their historical and critical context.

ENG 436. The English Renaissance. (3-0-3); on demand.
Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Selected literature from 1500 to 1600, including works by Skelton, Wyatt and Surrey, Sidney, Spenser, and Shakespeare (excluding his plays).

ENG 439. Senior Cooperative Education. (3-0-3); on demand.
Prerequisites: ENG 390, 391 and 497. Work experience in the technical or writing field in a position approved through an application process.

ENG 441. Restoration and Eighteenth Century British Literature. (3-0-3); on demand.
Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Representative selections of English literature, including works by Dryden, Pope, Swift, Addison and Steele, and Johnson.

ENG 442. Romantic Writers. (3-0-3); on demand.
Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Representative selections of English literature, including works by Wordsworth, Coleridge, Byron, Shelley, Keats, and the essayists.

ENG 443. Victorian Writers. (3-0-3); on demand.
Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Representative selections of English literature, including works by Browning, Tennyson, Arnold, and Carlyle.

ENG 444. Twentieth Century British Literature. (3-0-3); on demand.
Prerequisite: ENG 331 or ENG 332 with grade of "C" or better. Study of modern British literary genres.

ENG 445. Seventeenth Century British Literature. (3-0-3); on demand.
Prerequisite: ENG 331. A study of literature from the time of James I to the Restoration with emphasis on works by Donne and Johnson.

ENG 453. Modern Drama. (3-0-3); on demand.
Prerequisite: ENG 300. Representative dramas from the advent of realism to the present.

ENG 455. Early Dramatic Literature. (3-0-3); on demand.
Prerequisite: ENG 300. Representative drama from the Greeks to the mid-19th century.

ENG 463. American Fiction. (3-0-3); on demand.
Prerequisite: ENG 341 or 342. The development of American fiction from Charles Brockden Brown to Faulkner.

ENG 466. American Poetry. (3-0-3); on demand.
Prerequisite: ENG 300 or equivalent. The development of American poetry from its beginning to the present, with emphasis on such poets as Bradstreet, Whitman, Dickinson, Frost, Eliot, and Stevens.

ENG 470. Film and Literature. (3-0-3); on demand.
Prerequisite: ENG 300 or equivalent. An introduction to the study of film as literature with extensive reading in the history of film and viewing of selected film classics.

ENG 475. Senior Cooperative Education. (3-0-3); on demand.
Prerequisites: ENG 390, 391 and 497. Work experience in the professional writing field in a position approved through an application process. Not available for option credit.

ENG 476. Directed Studies. (1 to 3 hrs.); on demand.
Prerequisite: consent of instructor and department chair. This course is an independent study in English for the undergraduate major. Before registering, the student must present in writing a suggested study and a justification for that study. Each request for the course will be considered on its own merits in relation to the special needs of the student.

ENG 483. Advanced Poetry Writing. (3-0-3); on demand.
Prerequisite: ENG 293 or 395. Advanced instruction in poetry writing; organic and traditional structures; tone and persona; the sentence and the line; the lyric, dramatic, narrative, and meditative stances; and other concerns of poetics. An intensive writing workshop format with emphasis on poetry in the contemporary idiom.
ENG 484. Advanced Fiction Writing. (3-0-3); on demand.
Prerequisite: ENG 293 or 396. Advanced instruction in fiction writing: plot, conflict, characterization, point of view, atmosphere, and other concerns of contemporary fiction. An intensive writing workshop format with emphasis on contemporary fiction and the audience and market for literary fiction.

ENG 485. Advanced Nonfiction Writing. (3-0-3); I or II.
Prerequisite: ENG 200 or equivalent or consent of the instructor. Advanced instruction in creative nonfiction writing. Focus on the diversity of types of creative nonfiction including memoir, personal essay, autobiography, literary memoir, literary nature writing, literary journalism, literary travel writing, literary science writing, literary cultural criticism and other general literary nonfiction. Writing workshop format.

ENG 495. Seminar: Major Writers. (3-0-3); on demand.
Prerequisite: ENG 300. Intensive study of one or more major figures in the literature of the world.

ENG 497. Technical Editing. (3-0-3); on demand.
Prerequisite: ENG 390. Study of the practice and management of editing for technical, scientific, professional, and corporate reports and writings.

ENG 499C. Senior Seminar in English. (3-0-3); I, II, III.
Prerequisites: senior standing, completion of at least 24 hours in English courses, including ENG 331, 332, 341 and 342. Examination, in a seminar setting, of issues and opportunities for English majors. This course satisfies the integrative component for general education.

ESS - Earth Systems Science Courses

ESS 101. Dangerous Planet. (3-0-3); I, II.
This course focuses on the natural hazards that exist around the globe and impact humans in loss of life and property in seemingly unpredictable events. Emphasis will be on the cause and effect, patterns, emergency response and mitigation of natural hazards. Equates with GEO 101. This course satisfies the NSC II requirement for general education.

ESS 106. Introduction to Geology. (3-0-3); I, II, III.

ESS 108. Physical Geology. (3-2-4); I, II.
Earth materials, structures, and processes for geology majors and others who wish to take upper division ESS classes. Lab provides hands-on experience in rock and mineral identification and the use and interpretation of topographic and geologic maps.

ESS 199. Selected Topics. (1 to 6 hrs.); on demand.

ESS 201. Historical Geology. (2-2-3); II.
Prerequisite: ESS 108. Introduction to the geologic (rock) record of major physical and biological events in Earth's evolution.

ESS 239. Cooperative Education. (1 to 8 hrs.); I, II, III.
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

ESS 362. Mineralogy. (2-4-4); I, odd years.
Prerequisite: ESS 108. Physical and chemical properties of minerals; chemical, optical, and x-ray methods of identification, systematic survey of common mineral groups.

ESS 276. Geologic Methods. (2-2-3); I, alternate years.
Prerequisite: ESS 201 or consent of instructor. Basic field office and laboratory techniques and instruments used in geologic studies.

ESS 299. Selected Topics. (1 to 6 hrs.); on demand.

ESS 303. Planetary Geology. (3-0-3); I, odd years.
Prerequisites: ESS 108 and MATH 093 or higher, or an ACT math subscore of 18 or greater. A study of the processes affecting planetary origins and evolution, with an emphasis on processes uncommon on earth (impacts, geology of icy bodies, planetary rings, etc.), particularly in the outer regions of the solar system. The processes of planetary exploration and the various methods of data gathering from interplanetary probes will be examined.

ESS 315. Sedimentation and Stratigraphy. (2-4-4); I, alternate years.
Prerequisite: ESS 201. Origins and characteristics of sediments, sedimentary structures, depositional environments, facies, systems tracts, sequences and sedimentary basins. Lab provides hands-on experience in sediment analysis and techniques used in reconstructing stratal geometries.

ESS 325. Earth Structure and Tectonics. (2-4-4); II, odd years.
Prerequisites: ESS 108 and MATH 141 or MATH 174. Details of Plate Tectonic theory and the forces generated, which deform the Earth’s Crust. Geologic structures and geometrical techniques used in descriptive analysis.

ESS 339. Cooperative Education. (1 to 8 hrs.); I, II, III.
Prerequisite: ESS 239 and consent of department chair. Participation in supervised work experience in a professional environment.

ESS 340. Oceans & Atmospheres. (2-2-3); II, even years.
Prerequisite: ESS 108, or CHEM 101, or CHEM 111, or PHYS 201. An introduction to Oceanography and Atmospheric Science, with an emphasis on interrelationships such as energy transfer, circula-
tion patterns, and seasons. Human influences and cultural effects on international environmental strategies will be explored.

*ESS 350. Geomorphology.  
(2-2-3); I, alternate years.  
*Prerequisite: ESS 108. Landforms and geologic processes that shape the Earth’s surface. Lab emphasizes use of topographic maps, aerial photographs and remotely sensed images in landform recognition and interpretation.

ESS 363. Petrology.  
(2-4-4); II, even years.  
*Prerequisite: ESS 362. Origin, evolution and interpretation of igneous and metamorphic rocks; chemical, optical, and x-ray methods of analysis.

*ESS 376. Environmental Geology.  
(2-2-3); II.  
*Prerequisites: ESS 108 and MATH 135 or higher. Interaction of humans with surface and near-surface geological environments. Applies geological principles and techniques to problems associated with natural and anthropogenic geologic hazards, disposal/treatment of human and industrial wastes, and earth resource management.

*ESS 379. Invertebrate Paleontology.  
(2-4-4); I, odd years.  
*Prerequisite: ESS 201 or ESS 410. Invertebrate animals, their morphology, classification, paleoecology, phylogeny, and stratigraphic succession; faunal assemblages and research techniques.

ESS 380. Coal Geology.  
(3-0-3); II, odd years.  
*Prerequisites: ESS 108 and CHEM 111. A cradle-to-grave study of coal systems science. This course will address coal formation, occurrence, exploration for, and both utilization and environmental impacts of utilization in an integrated lecture/discussion/laboratory/field work environment. This course requires attendance on four Saturday field exercises.

(3-0-3); on demand.  
*Prerequisites: HON 101 and HON 102. Study and discussion of current topics, issues, and problems in various areas of the overall discipline of Earth Systems. Topics will vary from semester to semester.

ESS 399. Selected Topics  
(1 to 6 hrs.); on demand.  
*ESS 410. Geological History of Plants and Animals.  
(2-2-3); on demand.  
*Prerequisite: ESS 201. Evolutionary history of plants and animals throughout geological time.

*ESS 413. Micropaleontology.  
(2-2-3); on demand.  
*Prerequisites: ESS 201 and ESS 379 or ESS 410. Collection, preparation, microscopic investigation, classification, paleoecology, and stratigraphic succession of microfossils.

ESS 415. History of Geology.  
(2-0-2); on demand.  

ESS 425. Hydrogeology.  
(2-2-3); I, alternate years.  
*Prerequisites: ESS 108, ESS 200 or higher, and MATH 152; Corequisite: CHEM 112 or consent of instructor. Algebra-based course in applied ground water concerning the origin and movement of ground water, aquifers, behavior of pumped wells, general water chemistry and water quality, and ground water contamination.

ESS 430. Low-Temperature Geochemistry.  
(2-2-3); II, alternate years.  
*Prerequisites: CHEM 112, ESS 108 and 363 or consent of instructor. Chemical reactions between natural waters, atmospheric gases and earth materials in surface and near-surface environments.

ESS 439. Cooperative Education.  
(1 to 8 hrs.); I, II, III.  
*Prerequisites: ESS 339 and consent of department chair. Participation in supervised work experience in a professional environment.

ESS 440. Biogeochemical Cycles.  
(2-2-3); I, even years.  
*Prerequisites: ESS 325 and ESS 350. The study of cycles as a model for the Earth’s climate, its changes, and the integrated nature of the oceans, atmosphere, geology, and biology.

*ESS 450. Economic Geology.  
(3-0-3); on demand.  
*Prerequisite: ESS 262 or consent of instructor. Formation and occurrence of major metallic and nonmetallic mineral deposits of the world.

ESS 476. Special Problems.  
(1 to 6 hrs.); I, II, III.  
Prerequisite: consent of instructor. Topic to be approved prior to registration.

ESS 499. Selected Topics.  
(1 to 6 hrs.); on demand.  

ESS 499C. Earth System Science Senior Thesis.  
(3-0-3); II.  
Corequisite: EDSE 416.

FIN - Finance Courses

(3-0-3.) I, II.  
This course will enable students to analyze the influence of money on individuals and societies. This will be accomplished through an examination of culture, social, economic, geographic
FIN 199. Selected Workshop Topics. 
(1 to 4 hrs.); on demand.
Workshops on various finance subjects will be presented periodically to supplement the basic course offerings in finance. Credit toward degree programs must be approved by the student's advisor and the department chair.

FIN 252. Mathematics of Finance. 
(3-0-3); on demand.
Application of mathematical techniques for business and economic analysis. Topics covered include: interest annuities, amortization, sinking funds, bond valuation, and other relevant quantitative subjects.

FIN 264. Personal Finance. 
(3-0-3); on demand.
Planning personal finance, financial statements, budgeting, managing financial and non-financial assets, taxes, insurance, and estate planning.

FIN 325. Bank Management. 
(3-0-3); on demand.
Prerequisite: ACCT 281, ECON 101 or higher. Organization and operation of the commercial bank.

FIN 339. Cooperative Education III. 
(1 to 8 hrs.); I, II.
Prerequisite: consent of departmental cooperative education coordinator. Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (FIN 339/439) available for option credit.

FIN 342. Money and Banking. 
(3-0-3); on demand.
Prerequisite: ECON 101 or higher. Origin, development, and functions of money; banking functions and processes; the Federal Reserve System and monetary policy. Equates with ECON 342.

(3-0-3); I, II, III.
Prerequisites: ACCT 282, ECON 101 or higher, MATH 152 or equivalent. Financial management, management of cash, receivables, inventories, plant assets, short-term debt, long-term debt, intermediate-term debt, owner's equity.

(3-0-3); on demand.
Prerequisites: ACCT 282 and FIN 360. Examines the financial issues small businesses deal with at start-up and on a day-to-day basis. Students will learn how small businesses can apply financial principles to benefit the company. Equates with MNGT 365.

(3-0-3); on demand.
Prerequisites: ACCT 282 and FIN 360. Focus on short-term financial management decision-making covering topics which include: accounts receivable management, inventory management and control, cash management, accounts payable management, liquidity analysis, and short-term investing and financial alternatives. Short-term financial management decisions facing small businesses are emphasized.

FIN 372. Retirement Planning and Employee Benefits. 
(3-0-3); on demand.
Prerequisites: FIN 264 and 360. Covers retirement planning issues such as types of retirement plans, distribution options, retirement needs analysis, suitability of an investment portfolio for a qualified plan, Social Security, Medicare, and Medicaid; and employee benefit issues such as life, medical, and disability insurance.

FIN 373. Investments. 
(3-0-3); on demand.
Prerequisites: ECON 202 and FIN 360. Investment risks, security analysis, investment policy-making, both individual and institutional.

FIN 374. Estate Planning and Taxation. 
(3-0-3); on demand.
Prerequisites: FIN 264 and 360. Covers estate planning and taxation issues such as documentation, legal ownership to property, trusts, the federal gift tax, probate, and asset valuation.

(3-0-3); on demand.
Prerequisites: ACCT 282, CIS 101 and FIN 360. Interpretation and development of accounting and financial data and statements incorporating spreadsheet analysis and applications. Equates with ACCT 375.

FIN 376. Risk Management and Insurance. 
(3-0-3); on demand.
Prerequisites: FIN 264 and 360. Covers insurance topics such as life, medical and disability insurance, and business risk management.

FIN 379. Selected Workshop Topics. 
(1 to 4 hrs.); on demand.
Workshops on various finance subjects will be presented periodically to supplement the basic course offerings in finance. Credit toward degree programs must be approved by the student's advisor and the department chair.

(3-0-3); on demand.
Prerequisite: FIN 360 or equivalent, or consent of instructor. Analysis of the flow of funds in financial markets; characteristics of money and capital markets; characteristics of financial instruments; interest rate determination; purposes and characteristics of financial institutions; interactions of financial markets and financial institutions domestically and internationally.

FIN 439: Cooperative Education IV. 
(1 to 8 hrs.); I, II.
Prerequisite: consent of the departmental cooperative education coordinator. Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a senior-level status. Maximum of three hours of cooperative education credit (FIN 339/439) available for option credit.

FIN 460. Advanced Business Finance. (3-0-3); on demand.
Prerequisite: FIN 360. Includes intensive study of capital budgeting, cost of capital, capital structure, special topics in finance.

FIN 472. Portfolio Analysis. (3-0-3); on demand.
Prerequisites: FIN 360 and 373. Includes study of portfolio theory, risk analysis, portfolio management. Applications including computer analysis of financial data stressed.

FIN 476. Special Problems in Finance. (1 to 3 hrs.); on demand.
Prerequisite: completion of 21 hours in finance and economics, combined with prior consent of department chair. This course is an independent study of finance problems of special interest. Students must present in writing a suggested problem and justification for the study prior to registration. Each request will be considered on its own merit in relation to the special needs of the student.

FIN 485. Seminar in Financial Theory and Practice. (3-0-3); II.
Prerequisites: FIN 373 and 460. Examination and application of contemporary financial theory and analysis. Study of classical literature and the evolution of contemporary financial theory. Examination of the role of events and institutions on the evolution of financial thought.

FIN 490. Seminar in Financial Theory and Practice. (3-0-3); II.
Prerequisites: FIN 373 and 460. Examination and application of contemporary financial theory and analysis. Study of classical literature and the evolution of contemporary financial theory. Examination of the role of events and institutions on the evolution of financial thought.

FIN 499. Selected Workshop Topics. (1 to 4 hrs.); on demand.
Workshops on various finance subjects will be presented periodically to supplement the basic course offerings in finance. Credit toward degree programs must be approved by the student’s advisor and the department chair.

FNA - Fine Arts Courses

FNA 187. Opera Workshop. (0-2-1); I, II.
An introduction to the techniques of musical theatre with emphasis placed on the integration of music and action-dramatic study of operatic roles.

FRN - French Courses

FRN 101. Beginning French I. (3-0-3); I, II, III.
Emphasis on developing communicative skills. Listening, speaking, reading, writing. Basic grammar and orientation to French culture. Video and audio components. Computer enhanced instruction. On-line workbook and resources. This course satisfies the HUM II requirement for general education.

FRN 102. Beginning French II. (3-0-3); I, II, III.
Prerequisite: FRN 101. Continuation of FRN 101. Use of four skills for effective communication in a variety of situations.

FRN 201. Intermediate French. (3-0-3); I.
Prerequisite: FRN 102. Continuation of FRN 102. Increased emphasis on interactive language and grammatical competency.

FRN 202. Conversation and Composition. (3-0-3); II.
Prerequisite: FRN 201. Continuation of FRN 201. Listening and reading for proficiency. Creative personal expression in speaking and writing.

FRN 203. Introduction to France. (3-0-3); on demand.
Prerequisite: FRN 102. Continuation of FRN 202. Implementation of four skills into broad-based dialogue and discussion relating to all aspects of French culture and civilization.

FRN 205. French Culture and Civilization. (3-0-3); II.
Survey of art, architecture, music and history of France. Cuisine, fashion, and cinema. The imprint of France on America and the Third World. Taught in English; some knowledge of French helpful but not required. Equates with IST 205.

FRN 206. Business French. (3-0-3); I, II.

FRN 301. Conversation and Composition. (3-0-3); II.
Prerequisite: FRN 201. Corequisite: FRN 202. This course will focus primarily on the skills of oral and written communication. Stu-
Students will speak and write on a variety of topics in the target language, and will engage in reading, vocabulary building, and written and oral reinforcement activities.

**FRN 302. Advanced Phonetics and Conversation.**
(3-0-3); II.
Prerequisite: FRN 202. In-depth analysis of phonology and articulation. Speaking practice in a variety of styles, emphasizing corrective pronunciation and fluency. May be taken two times for credit.

**FRN 303. Survey of French Literature I.**
(3-0-3); on demand.
Prerequisite: FRN 202. A survey of major works and authors in French literature up to 1750, including the following periods: Medieval, Renaissance, Baroque, Classicism, and Enlightenment.

**FRN 304. Survey of French Literature II.**
(3-0-3); on demand.
Prerequisite: FRN 202. A survey of major authors from the French Revolution to the present, including the following movements: Pre-Romanticism, Romanticism, Realism, Symbolism, Modernism, Surrealism, Existentialism, Absurdism, and Post Modernism.

**FRN 402. Advanced French Conversation.**
(1-0-1); on demand.
Prerequisite: FRN 301. Analysis and imitation of native speech patterns. Practice in aural/oral communication for a variety of situations. May be taken three times for credit.

**FRN 403. Seminar in French Literature I.**
(3-0-3); on demand.
Prerequisite: FRN 303 or 304. A seminar on an author, genre, or period in Medieval or Early Modern French literature (up to 1750). May be taken three times for credit.

**FRN 404. Seminar in French Literature II.**
(3-0-3); on demand.
Prerequisite: FRN 303 or 304. A seminar on an author, genre, or period in modern French literature (after 1750) such as film. May be taken three times for credit.

**FRN 405. Linguistics and Language Teaching.**
(6 hrs.); on demand.
Prerequisite: must be admitted to the Teacher Education Program. The application of current linguistic theories to the methodology of teaching French and Spanish; micro-teaching practice and field experiences in the four skills, grammar, and culture. This course includes 30 clock hours of field experience (grades P-12). Equates with SPA 405.

**FRN 476. Directed Studies.**
(1 to 3 hrs.); on demand.
This course is a directed study in French for undergraduate French majors. Each request for the course will be considered on its own merits in relation to the special need of the student. May be taken three times for credit.

**FRN 499C. Senior Collegium in French.**
(3-0-3); I.
Prerequisites: senior standing and 18 hours in French courses, including FRN 403 or 404. An integrative capstone course in French. This course satisfies the integrative component for general education.

**HUM - Humanities Courses**

**FLM 170. Introduction to Film.**
(3-0-3); I, II.
Introduction to Film is a general education course designed to introduce students to the study of film as an art form. In particular, it will give students the historical background and critical vocabulary needed to analyze film aesthetically. This interdisciplinary course satisfies the HUM I requirement for general education.

**FLM 270. Film History.**
(3-0-3); II, even years.
Prerequisite: FLM 170. A survey of major technological, generic, economic, social, cultural, and historical developments, influential figures, and landmark films in the evolution of world cinema as an art form, an entertainment medium, and an industry from the late 19th Century to the present.

**FLM 399. Special Topics.**
(3-0-3); on demand.
Prerequisite: FLM 170. Special courses that supplement regular course offerings in the Film Studies Minor. May be repeated if the subtitle indicates that a different topic is being covered.

**FLM 470. Film Theory.**
(3-0-3); II, odd years.
Prerequisite: FLM 170. A survey of influential film theories.

**FYS - First Year Seminar Course**

**FYS 101. First Year Seminar.**
(3-0-3); I, II.
The intent of this course is to establish the expectations of life in an academic setting and as a local, national and global citizen. The foundations of communication and intellectual skills will be introduced in this course. These skills will be built through the interdisciplinary exploration of a common regional, national or global theme. This course will include a common reading assignment designed to provide a common introduction to academic life at Morehead State University. This course satisfies the core requirement for general education.

**GEO - Geography Courses**

**GEO 100. The Human World.**
(3-0-3); I, II, III.
Human Geography studies patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. This course employs spatial concepts and landscape analysis to examine human social organization and its environmental consequences, with some emphasis on the methods and tools used by geographers. This course satisfies SBS II requirement for general education.

**GEO 101. Dangerous Planet.**
(3-0-3); I, II.
This course focuses on the natural hazards that exist around the
globe and impact humans in loss of life and property in seemingly unpredictable events. Emphasis will be on the cause and effect, patterns, emergency response and mitigation of natural hazards. Equates with ESS 101. This course satisfies the NSC II requirement for general education.

GEO 201. Map Interpretation and Analysis.
(2-1-3), I.
An introduction to the basic concepts of spatial analysis and applications of analytical techniques to geographically referenced information. Discussion will center on types of spatial data, data collection, presentation, and basic techniques for analyzing and mapping spatial distributions.

GEO 211. Economic Geography.
(3-0-3); II.
World commodities and their regional distribution. Analysis of land uses, agriculture, manufacturing, and extractive industries against a background of natural cultural environments; consideration of economic factors in current international affairs.

GEO 241. United States and Canada.
(3-0-3); I.
Major land-use regions of the United States and Canada, their physical and cultural landscapes. Equates with IST 241.

GEO 300. World Geography.
(3-0-3); I, II.
A general survey of the human and physical geography of the major regions of the world with a concentration on development. Emphasis is on the interaction between individuals and the physical and cultural landscape in various settings. Equates with IST 300.

GEO 305. Cultural Geography.
(3-0-3); on demand.
Analysis of the role of culture in the formation of landscape patterns. This includes an introduction to geographical approaches to landscape evolution, diffusion processes, identity, nature, culture regions, and environmental perception.

GEO 306. Geography of World Population.
(3-0-3); on demand.
This course will familiarize students with the geographic distribution, growth dynamics, and migration processes of human populations. Students will gain insight into the causes and outcomes of population growth and decline through examination of population theories and selected case studies.

GEO 310. Australia.
(3-0-3); on demand.
Resources of Australia, New Zealand, and islands of the Pacific; significance of position and political connection of these lands. Equates with IST 310.

GEO 311. Geography of the Global Economy.
(3-0-3); on demand.
Spatial analysis of higher level economic activities. Focus is on wholesaling, interregional and international trade and transportation, producer services, and investment. Equates with IST 311.

GEO 315. Urban Geography.
(3-0-3); on demand.
A survey of urban evolution, urbanization, economic structure, land use, and urban planning.

GEO 316. Dynamic Landscapes and Land Use.
(3-0-3); on demand.
Geographic perspectives on the ways in which humans employ the land and its resources. Consideration is given to human and physical systems that influence land cover and land use change.

GEO 320. Latin America.
(3-0-3); on demand.
The geographic study of Mexico, the Central American Republics, the islands of the Caribbean, and South America.

GEO 326. Cuba and the Caribbean.
(3-0-3); on demand.
The people and places of the Caribbean basin with a concentration on climate, culture, economics and tourism. A special focus will address the dynamics of Cuban socioeconomic development. Equates with IST 326.

GEO 328. Africa.
(3-0-3); on demand.
Resources, both natural and cultural; changing political conditions and affiliations of African countries, recognition of, and reasons for, the growing importance of this continent in world affairs. Geographic factors in the economic, social, and political structure of Europe; emphasis on natural regions, resource distribution, and industrial development. Equates with IST 328.

GEO 331. Europe.
(3-0-3); on demand.
A study of the cultural and physical regions of Europe including the socioeconomic and political structure of the European Union.

GEO 341. Appalachia.
(3-0-3); on demand.
A geographic analysis of the various physical and human elements of the Appalachian Highlands. Emphasis is placed on the relationship of the physical environment to human activities in the region.

GEO 344. Kentucky.
(3-0-3); on demand.
Physiographic divisions and subdivisions; interpretations of natural features; occupations and land use; a survey of political units and consideration of traditions and potentialities.

(3-0-3); on demand.
Prerequisite: GEO 101 or consent of instructor. The study of environmental concepts, issues and dynamics from a spatial and geographic perspective.

GEO 349. Introduction to GIS/Cartography.
(3-0-3); on demand.
History of map-making; properties and qualities of maps; characteristics of map projections; construction of basic projections; basic techniques of mapping spatial data.

GEO 351. Geographic Information Systems.
(3-0-3); on demand.
Prerequisite: GEO 349. This course addresses selected layers of
spatial data for the base and body of maps, and includes field mapping techniques and digital map development and reproduction.

GEO 353. GIS Applications.  
(3-0-3); on demand.  
Prerequisite: GEO 349. This course will familiarize students with the different types of projects and questions that Geographic Information Systems can be used to address. Students will gain an understanding of different techniques through real-world examples and hands-on practice.

(2-2-3); on demand.  
Introduction to principles, techniques, and applications of remotely sensed data. Provides training needed to map and monitor the environment through digital image processing of satellite data and air photos. The course will develop abilities for inventory, mapping, and monitoring of land use, vegetation, and other geographic features.

GEO 360. Physical Geography of North America.  
(3-0-3); on demand.  
Prerequisite: GEO 101 or ESS 108. Description and detailed analysis of the physiographic provinces. An explanation and interpretation of surface features and their evolution.

GEO 361. The World of Caves.  
(3-0-3); on demand.  
Prerequisite: GEO 101 or ESS 106 or consent of department chair. Introduction to the physical processes that create cavern systems and produce a characteristic surface landscape with sinkholes, sinking streams, and springs, known as "karst" terrain. Course includes field trips to several cave regions in Kentucky.

GEO 366. Political Geography.  
(3-0-3); on demand.  
A study of principles and concepts of political geography and their application to understanding the variation of political phenomena from place to place on earth. Equates with GOVT 372.

GEO 370. Geography of World Religions.  
(3-0-3); on demand.  
Prerequisite: GEO 100 or 300. Analysis of the distributions and geographic patterns of modern religions. Particular attention is paid to the geographic patterns that were created as a result of and that helped to create the rituals and traditions of the major world religions. Equates with IST 324.

GEO 383. Asia.  
(3-0-3); on demand.  
The human-land relations characterizing this large and diverse region. An evaluation of a continent in the midst of change in terms of geographic potentials. Equates with IST 383.

GEO 385. The Middle East.  
(3-0-3); on demand.  
A study of the Middle East, its neighbors, and Islam with a focus on the physical resources, religious divisions, cultural groups and the geopolitics of the region. Equates with IST 385.

GEO 390. Weather and Climate.  
(3-0-3); on demand.  
Prerequisite: GEO 101. Introduction to the physical elements of weather and climate; classifications of types and their distribution, with particular reference to the effects of climate on the earth's physical and cultural landscapes.

GEO 399. Selected Topics in Geography.  
(3-0-3); on demand.  
Special courses which supplement regular course offerings. May be repeated if the subtitle indicates a different course is being offered. Additional prerequisites, if any, will depend upon the course offered.

GEO 476. Special Problems.  
(1 to 3 hours); on demand.  
Prerequisite: consent of instructor. Research project or directed readings on a special topic developed with the instructor.

GEO 495. Internship to Geography.  
(3 to 12 hours); on demand.  
Prerequisites: nine hours of geography courses and approval of internship coordinator. A supervised work study experience involving a field within geography. Only six hours will count toward geography major.

GEO 499C. Senior Seminar in Geography.  
(3-0-3); II.  
A course intended for geography majors and minors with senior status and at least 21 hours in geography. Students will conduct quantitative research projects, including written and oral presentations. Course examines professional and graduate opportunities in geography. This course satisfies the integrative component for general education.

GER - German Courses

GER 101. Beginning German I.  
(3-0-3); on demand.  
Fundamentals of structure: basic vocabulary, reading, writing, pronunciation and some conversation.

GER 102. Beginning German II.  
(3-0-3); on demand.  
A continuation of GER 101.

GER 201. Intermediate German I.  
(3-0-3); on demand.  
A review of grammar and pronunciation, with emphasis on reading of contemporary writings.

GER 202. Intermediate German II.  
(3-0-3); on demand.  
Prerequisite: GER 201. A continuation of GER 201.

GER 203. Expository German.  
(3-0-3); on demand.  
Techniques of reading for accurate information in expository writing in the natural and social sciences and the humanities.

GER 301. Grammar and Conversation.  
(3-0-3); on demand.  
Further development of language skills. Extensive experience in the language laboratory is required.
GER 302. Composition and Conversation.
(3-0-3); on demand.
Prerequisite: GER 301. A continuation of GER 301 with greater emphasis on stylistics.

GOVT - Government Courses

GOVT 102. Introduction to Politics.
(3-0-3); I, II.
This course introduces students to the major issues and features of American Government, International Relations, Comparative Government and Political Theory. By presenting students with an array of problems and controversies specific to the four main subfields of Political Science, the course aims not only to give students an overview of the discipline by presenting to them some of the most pressing problems, domestic and international. The course also aims to equip students with knowledge that will help them understand American politics as well as international affairs outside the classroom. This course satisfies the SBS II requirement for general education.

GOVT 141. United States Government.
(3-0-3); I, II, III.
This course introduces students to major features of American Government: The Declaration of Independence and Constitution; American ideals including equality and civil liberties; key inflection points in the country's development; the institutions of U.S. Government and their operation; non-institutional features of government including public opinion, interest groups, and political parties; and foreign and domestic policy issues of contemporary concern. This course satisfies the SBS I requirement for general education.

GOVT 180. Introduction to Political Theory.
(3-0-3); I, II.
An introductory course in political philosophy with an emphasis on familiarity with concepts of human nature, society, democracy, and revolution. This course satisfies the HUM II requirement for general education.

GOVT 230. Introduction to Comparative Politics.
(3-0-3); I, II.
An introduction to the concepts and themes of comparative government, showing the evolution of political systems, and their response to problems of organization, order and governance.

GOVT 242. State and Local Government.
(3-0-3); I, II.
A study of the nature, organization, powers and functions of American state and local governments.

GOVT 262. U.S. Foreign Policy.
(3-0-3); I.
This course will provide an extensive overview of U.S. foreign policy execution and outcomes and historic events from the end of the Second World War to the present day. The course is divided into segments designed to consider theoretical, institutional and thematic focal points of American foreign policy during the past 60 years. This course satisfies the SBS I requirement for general education.

GOVT 289. Methods of Political Inquiry.
(3-0-3); I, II.
Prerequisites: GOVT 141, 180 and 230. CIS 101 recommended. An introduction to the basic concepts and methods of the logic of political inquiry and empirical research, with an emphasis on understanding the fundamental perspectives of political inquiry and the use of basic empirical and computer techniques to conduct political inquiry.

GOVT 301. Comparative Politics of Development.
(3-0-3); I, alternate years.
Prerequisites: GOVT 230 and 289. Thematic study of political, economic, and social problems in developing and newly industrialized countries, with emphasis on the politics of underdevelopment, state autonomy, and development strategies.

GOVT 302. Politics of Culture.
(3-0-3); II, alternate years.
Prerequisite: GOVT 289. A study of the relationship between a society's ideas and practices of the good, the true, and the beautiful and its ideas about politics and political life.

GOVT 303. Comparative Constitutional Law and Politics.
(3-0-3); I, alternate years.
Prerequisites: GOVT 230 and 289. A comparative cross-national study of constitutional law and politics with particular emphasis on governmental powers and individual rights issues in the United States, Great Britain, Canada, and Germany. Equates with IST 334.

GOVT 304. Politics of Transition.
(3-0-3); II, alternate years.
Prerequisites: GOVT 230 and 289. Analysis and discussion of change in political structures and institutions including changes from military to democratic forms and the impact of economic liberalization.

GOVT 305. Political Behavior.
(3-0-3); on demand.
Prerequisites: GOVT 141 and 289. A study of mass and elite political behavior including political socialization, attitudes, and opinions; voting behavior; and government decision making.

GOVT 312. Western Political Thought.
(3-0-3); I.

GOVT 314. American Political Thought.
(3-0-3); II, alternate years.
Prerequisites: GOVT 141, 180 and 289. A study and discussion of American political ideas as they are expressed in a variety of sources, including pamphlets, literature, poetry, autobiography, and political philosophy.

GOVT 316. Modern Ideologies.
(3-0-3); II, alternate years.
Prerequisites: GOVT 180 and 289. A study of the doctrines of liberalism, conservatism, socialism, fascism, and anarchism as political ideas, their major proponents, and their use as tools of poli-
GOVT 317. Feminist Political Thought.  (3-0-3); I, alternate years.  
Prerequisites: GOVT 180 and 289. History and development of feminist political thought. Perspectives include those of Fuller, Millet, Collins, MacKinnon, and Irigaray. Equates with WST 317.

GOVT 318. Twentieth Century Political Thought.  (3-0-3); II.  
Prerequisites: GOVT 180 and 289. A study of the major developments in 20th century social and political theory, including trends in liberal thought, critical theory, psychoanalysis, post-modernism, and conservatism.

GOVT 321. Constitutional Law: Governmental Powers.  (3-0-3); I.  
Prerequisites: GOVT 141 and 289. A study of the development, origins, and current character of the U.S. Constitution, with particular attention to separation of powers and federal-state relations.

GOVT 322. Courts and Civil Liberties.  (3-0-3); I.  
Prerequisites: GOVT 141 and 289. A study of the federal and state court systems and of the Bill of Rights and the 14th Amendment, with particular attention to questions of freedom of speech, religion, and association; due process of law; privacy; and discrimination.

GOVT 324. Environmental Law and Policy.  (3-0-3); I.  
Prerequisite: GOVT 141. A study of the political and legal aspects of major environmental policies including the impact of energy policies on environmental health and safety.

GOVT 328. Law, Government and Privacy in the Computer Age.  (3-0-3); on demand.  
Prerequisite: GOVT 289. An in-depth study of information gathering policies and procedures with an examination of the technologies, agencies and organizations which shape them. Privacy legislation and competing values affecting information policy will be discussed, and students will have the opportunity to develop skill in online research in government documents.

GOVT 329. North American Politics: United States and Canada.  (3-0-3); I, III.  
A comparative study of the governments and politics of the United States and Canada, their political cultures, public opinion, interest groups and political parties; the evolution, structure, and operation of their governments, the behavior of their public officials, and their public policies. Equates with IST 329.

GOVT 330. Parliamentary Democracies.  (3-0-3); I, alternate years.  
Prerequisites: GOVT 230 and 289. A study of the constitutional development, political organization, legislatures, administration, and courts of the governments of the United Kingdom, France, and Germany.

GOVT 331. Politics of the Middle East and North Africa.  (3-0-3); II, alternate years.  
Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in Middle Eastern/North African Politics. Includes issues of religion, ethnic conflict, modernization, and democratization. Equates with IST 302.

GOVT 332. Politics of Latin America and the Caribbean.  (3-0-3); I, alternate years.  
Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in Latin American/Caribbean politics. Includes issues of debt, development, and democratization. Equates with IST 303.

GOVT 333. Politics of Sub-Saharan Africa.  (3-0-3); on demand.  
Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in African politics. Includes issues of debt, development, and democratization. Equates with IST 304.

GOVT 334. Russia and Eastern European Governments.  (3-0-3); II.  
Prerequisites: GOVT 230 and 289. A study of the Russian political system; ideological base, governing structures, and political processes; and an analysis of the major Eastern European governments and their political life. Equates with IST 338.

GOVT 337. Politics of Asia.  (3-0-3); on demand.  

GOVT 342. The American Presidency.  (3-0-3); I, alternate years.  
Prerequisites: GOVT 141 and 289. A study of the presidency in American politics emphasizing the Constitution, presidential selection, presidential power, interbranch relations, role of the public, psychological theories of the presidency, and presidential policy-making.

GOVT 343. Political Parties and Elections.  (3-0-3); I, alternate years.  
Prerequisites: GOVT 141 and 289. A study of the nature and role of parties and interest groups; party structure and development, functions of primaries, nomination system and campaign methods, and policy-making.

GOVT 344. Kentuck Government.  (3-0-3); I, alternate years.  
Prerequisite: GOVT 289. A study of the nature, organization, powers, and functions of Kentucky state government.

GOVT 347. American Public Policy.  (3-0-3); II, alternate years.  
Prerequisites: GOVT 141 and 289. A study of major national domestic and foreign policy problems, including health, education, labor, transportation, defense, and national security, focusing on
GOVT 349. African-American Politics. (3-0-3); II, alternate years.  
Prerequisites: GOVT 141 and 289. A study of 20th century African-American legal and political action with particular emphasis on the Civil Rights Movement and political conflicts over racial equality in education, public accommodations, voting, housing and employment.

GOVT 351. Public Administration. (3-0-3); on demand.  
Prerequisites: GOVT 141 and 289. A study of the historical evolution, theory of organization and administration, and the personnel, financial, and legal aspects of public administration.

GOVT 353. Public Personnel Administration. (3-0-3); on demand.  
Prerequisites: GOVT 289 and 351. A study of personnel utilization; concepts, principles and practice of the merit system; leadership; decision-making processes; and motivation of public employees.

GOVT 354. Congress and the Federal Bureaucracy. (3-0-3); II, alternate years.  
Prerequisites: GOVT 141 and 289. A study of the role of Congress and federal bureaucracy in American government. Emphasis is placed on historical and comparative analysis of these institutions since 1950.

GOVT 355. Women and Politics. (3-0-3); II, alternate years.  
Prerequisites: GOVT 141 and 289. Participation of women in American government. Gender differences in political attitudes and voting; impact of electoral laws on election of women; and impact of women on creation and implementation of policy. Equates with WST 355.

GOVT 360. United Nations and World Organizations. (3-0-3); II.  

GOVT 362. Current World Problems. (3-0-3); I, III.  
A study of major international problems since World War II, with emphasis on Russian-American relations, regional political conflicts, and major world issues including food, population, and human rights policies. Equates with IST 362.

GOVT 364. International Relations. (3-0-3); I, alternate years.  
Prerequisite: GOVT 289 or consent of department. A study of international relationships in theory and practice; concepts of power and its application; machinery of foreign policy making and implementation; world politics and law; and the world community. Equates with IST 306.

GOVT 367. Politics of International Economic Relations. (3-0-3); I, alternate years.

GOVT 368. Human Rights and Global Justice. (3-0-3); I.  
Prerequisite: GOVT 289. A study of the human rights idea; human rights movement; national and international human rights charters and organizations; political, civil, social, and economic rights; rights of women, children, and minorities; and human rights remedies for collective violence, genocide and terrorism. Equates with IST 368.

GOVT 372. Political Geography. (3-0-3); on demand.  
Prerequisite: GOVT 289. A study of the principles and concepts of political geography and their application to an understanding of political phenomenon worldwide. Equates with GEO 366.

GOVT 373. Introduction to Women’s Studies. (3-0-3); on demand.  
Prerequisites: GOVT 141 and junior standing. Prior approval of department chair is required. A semester-long work study experience in Washington, D.C. Only six semester hours of this internship may be used in satisfaction of government major or minor elective credit.

GOVT 376. Special Problems in Government. (1 to 3 hrs.); on demand.  
Prerequisite: GOVT 289. Special courses which supplement regular course offerings. May be repeated if the subtitle indicates a different course is being offered.

GOVT 389. Honors Seminar. (3-0-3); on demand.  
Prerequisite: open only to juniors and seniors in the Honors Program. An analysis and discussion of political ideas, institutions, and policies. Topics will vary from semester to semester.

GOVT 476. Special Problems in Government. (1 to 3 hrs.); on demand.  
Prerequisites: GOVT 289, consent of instructor, and senior standing. Original research project or readings in a particular subject area of government and politics. Open only to government majors and minors with senior standing.

GOVT 492. Washington Center Seminar Program. (3 hrs.); I, II, III.  
Prerequisites: GOVT 141 and junior standing. Prior approval of department chair is required. A two-week intensive study course in Washington, D.C., during January, May, or August on major current legal, political, domestic and foreign policy issues.

GOVT 494. Washington Center Internship Program. (15 hrs.); I, II, III.  
Prerequisites: GOVT 141 and junior standing. Prior approval of department chair is required. A semester-long work study experience in a congressional or administrative agency office in Washington, D.C. Only six semester hours of this internship may be used in satisfaction of government major or minor elective credit.
the arts. This knowledge will be used to analyze, compare, and
formulate perspectives, concepts and theories from history and
students will learn to identify and evaluate interdisciplinary in-
arguments. In reading this diverse group of academic writings,
arly articles from History, Art, Cinema, Film, Literature, English,
movies. Through the reading of historical primary sources, schol-
intellectual and cultural forces that shaped the making of these
films against both the historical reality of actual events and the
This course seeks to examine the portrayal of world history in
(3-0-3); I.
HIS 103. Holly-World: World History and Film.
(3-0-3); I.
This course seeks to examine the portrayal of world history in
films against both the historical reality of actual events and the
intellectual and cultural forces that shaped the making of these
movies. Through the reading of historical primary sources, schol-
larly articles from History, Art, Cinema, Film, Literature, English,
and Interdisciplinary Journals students will learn how to critically
interpret a variety of scholarly readings and understand scholarly
arguments. In reading this diverse group of academic writings,
students will learn to identify and evaluate interdisciplinary in-
formation, perspectives, concepts and theories from history and
the arts. This knowledge will be used to analyze, compare, and
contrast the portrayal of significant historical moments, people,
and events as depicted in films about world history. In learning
about both the history of the world from Ancient to Modern times
alongside interdisciplinary approaches to understanding these
views, students will gain an overall timeline of influential mo-
mements in world history along with developing the critical reading,
writing, and interpretive skills necessary to understand cultures
outside the United States. This interdisciplinary course satisfies
the HUM II requirement for general education.

HIS - History Courses

HIS 101. The History of Your World.
(3-0-3); I.
This course will examine the history of our world since 1945. Us-
ing a variety of approaches, including narrative reasonings, his-
torical primary sources, and film, this course will introduce stu-
dents to cultures across the world, helping them to construct a
global historical narrative. This course satisfies the HUM II re-
quirement for general education.

HIS 102. "Generation Why?" Understanding Ameri-
can Society.
(3-0-3); I.
This course will historically examine American social movements
in the 20th century and their impact on our current understand-
ings of American life. This class combines historical approaches
with the legal issues of social justice as both a desired outcome of
these movements and a means of regulating American Society. In
order for students to be responsible citizens in our world, they
must understand both the history of America and the legal strugg-
gles over issues of equality and social change. This course satisfies
the SBS I requirement for general education.

HIS 103. Holly-World: World History and Film.
(3-0-3); I.
This course seeks to examine the portrayal of world history in
films against both the historical reality of actual events and the
intellectual and cultural forces that shaped the making of these
movies. Through the reading of historical primary sources, schol-
larly articles from History, Art, Cinema, Film, Literature, English,
and Interdisciplinary Journals students will learn how to critically
interpret a variety of scholarly readings and understand scholarly
arguments. In reading this diverse group of academic writings,
students will learn to identify and evaluate interdisciplinary in-
formation, perspectives, concepts and theories from history and
the arts. This knowledge will be used to analyze, compare, and

GOVT 496. Frankfort Legislative Intern Program.
(15 hrs.).
Prerequisite: prior approval of department chair is required. Five
months of work study experience with the Kentucky General As-
sembly during its biennial sessions. Open to all MSU students, but
the selection of interns will be made by program personnel.

GOVT 498. Local, State, National, and International
Government Internship.
(3 to 15 hrs.); on demand.
Prerequisites: related course work in GOVT recommended, and
prior approval of GOVT internship coordinator. Only six hours
will count toward government major or minor. A supervised work
study experience in local, state, national, and international gov-
ernment.

GOVT 499C. Senior Seminar.
(3-0-3); I, II.
Prerequisites: GOVT 289 and senior standing. A capstone course
for senior government majors in which students will read and
analyze specialized literature in political science, conduct research
projects, and formally present their research findings. This course
satisfies the integrative component for general education.
HIS 303. The Civil War and Reconstruction. (3-0-3); on demand.  
Prerequisite: HIS 250 or consent of the department. The role of the southern states in the rebirth of the American nation.

HIS 306. The United States, 1939-present. (3-0-3); on demand.  
Prerequisite: HIS 250 or consent of department. America from World War II to the end of the Cold War. Emphasis is placed on social conditions and issues.

HIS 307. Vietnam and Watergate. (3-0-3); II.  
Prerequisite: HIS 250 or consent of department. Study of the Vietnam War and the Watergate scandal in the context of policy developments in America since 1945.

HIS 308. The U.S. in the Industrial Age, 1877-1939. (3-0-3); on demand.  
Prerequisite: HIS 250 or consent of department. History of the United States from the end of Reconstruction until entry into World War II. The course focuses on industrialization and the expansion of corporate life, the social, cultural, and demographic changes (especially migration and immigration) that accompanied industrial and commercial transformation, and social and political movements of the Gilded Age, Progressive, Depression, and New Deal eras.

HIS 310. African-American History. (3-0-3); I.  
Prerequisite: HIS 250 or consent of department. African-American history from the origins of slavery to contemporary times.

HIS 311. Native American History. (3-0-3); II.  
Prerequisite: HIS 250 or consent of department. Historical development of native Americans from their entrance into this hemisphere to current conditions and issues.

HIS 312. Women in American History. (3-0-3); II.  
Prerequisite: HIS 250 or consent of department. Experiences and perceptions of women throughout American history. Significant roles and issues are emphasized. Equates with WST 313.

HIS 313. Religion in American History. (3-0-3); I.  
Prerequisite: HIS 250 or consent of department. Religion’s interaction with facets of American society. The role of religion in molding the nation.

HIS 317. United States Foreign Relations. (3-0-3); on demand.  
Prerequisite: HIS 250 or consent of department. Survey of foreign relations of the United States from its conception to United Nations involvement.

HIS 318. American Military History. (3-0-3); on demand.  
Prerequisite: HIS 250 or consent of department. Origins, course, and effects of American involvement in war.

HIS 319. American Life and Thought. (3-0-3); on demand.  
Prerequisite: HIS 250 or consent of department. Survey of American intellectual heritage from Puritanism to the contemporary era.

HIS 321. The American Frontier. (3-0-3); I.  
Prerequisite: HIS 250 or consent of department. The westward movement and the shaping of American life and institutions.

HIS 322. History of Appalachia. (3-0-3); II.  
Prerequisite: HIS 250 or consent of department. A social, economic, and political history of the people and the events of the Appalachian Mountains.

HIS 323. History of Kentucky. (3-0-3); I, II.  
Colonial birth to the creation of the Commonwealth with emphasis on constitutional and social development.

HIS 325. History of the South. (3-0-3); on demand.  
Prerequisite: HIS 250 or consent of department. A study of southern sectionalism and the ongoing development of regional characteristics.

HIS 336. History of Canada. (3-0-3); II.  
Prerequisite: consent of department chair. A study of Canada’s intellectual, political, economic, and social development, including its colonial origins, the creation and evolution of its confederation, and the nature of its involvement in international affairs. Equates with IST 331.

HIS 351. England to 1688. (3-0-3); I.  
Prerequisite: HIS 250 or consent of department. The political, social, and economic institutions of England through the fall of the Puritan Commonwealth. Equates with IST 351.

HIS 352. England since 1688. (3-0-3); II.  

HIS 353. Russia to 1917. (3-0-3); I.  
Prerequisite: HIS 250 or consent of department. The story of Russia from Kievan times to the overthrow of the Romanov dynasty. Equates with IST 353.

HIS 354. Russia since 1917. (3-0-3); II.  
Prerequisite: HIS 250 or consent of department. Detailed account of Soviet Russia from revolution through the end of the Cold War. Equates with IST 354.

HIS 355. Modern Germany. (3-0-3); on demand.  
Prerequisite: HIS 250 or consent of department. History of Germany from unification to the present in the context of European
HIS 356. Medieval Europe.
(3-0-3); I.
Prerequisite: HIS 250 or consent of department. Western history from the collapse of Rome to the Renaissance of the 16th century.

HIS 357. The Renaissance and Reformation.
(3-0-3); II.
Prerequisite: HIS 250 or consent of department. A social and intellectual history of the beginning of modern Europe.

HIS 358. Revolutionary Europe.
(3-0-3); on demand.
Prerequisite: HIS 250 or consent of department. History of Europe from the Age of Absolutism to the collapse of the Napoleonic Empire. Equates with IST 358.

HIS 359. Nineteenth Century Europe.
(3-0-3); on demand.
Prerequisite: HIS 250 or consent of department. The politicians, nationalistic trends, and unification movements leading to World War I. Equates with IST 359.

HIS 361. Twentieth Century Europe.
(3-0-3); on demand.
Prerequisite: HIS 250 or consent of department. Detailed survey of World War II, the Cold War, and contemporary events. Equates with IST 361.

(3-0-3); II.
Prerequisite: HIS 250 or consent of department. Focus on early African states, the slave trade era, the rise and fall of imperial empires, and post-independence events. Equates with IST 370.

HIS 371. Traditional China.
(3-0-3); I.
Prerequisite: HIS 250 or consent of department. Survey of early Chinese civilization and its institutions. Equates with IST 371.

HIS 372. Modern China.
(3-0-3); II.
Prerequisite: HIS 250 or consent of department. Survey of Chinese history since the 19th century. Equates with IST 372.

(3-0-3); on demand.
Prerequisite: HIS 250 or consent of department. Survey of Japanese history from the beginning of its civilization to its rise as a world power. Equates with IST 373.

HIS 374. The Middle East.
(3-0-3); on demand.
Prerequisite: HIS 250 or consent of department. Survey of the Moslem world beginning with the eighth century and culminating in the present Middle Eastern situation. Equates with IST 374 and WST 374.

HIS 376. Ancient History.
(3-0-3); on demand.
Prerequisite: HIS 250 or consent of department. The earliest civilizations of the Nile and the Fertile Crescent and their impacts on western civilization.

HIS 377. Twentieth Century Asian Wars.
(3-0-3); on demand.
Prerequisite: HIS 250 or consent of department. History of war in Asia from 1932 until 1975. The course examines the Pacific War, Korean War, Vietnam War, and Cambodian Conflict from the Asian Perspective using a cultural approach. Equates with WST 377.

HIS 379. Latin American History.
(3-0-3); on demand.
Prerequisite: consent of department chair. Analysis of historical events, and circumstances, their origins and effects.

HIS 389. Honors Seminar.
(3-0-3); on demand.
Prerequisite: consent of department chair. Analysis of historical events, and circumstances, their origins and effects.

HIS 399. Selected Topics in History.
(3-0-3); I, II.
Prerequisites: HIS 250 and at least one other 300-level history course. Required of each history major. Common research effort will be undertaken.

(3-0-3); I.
Prerequisites: admission to TEP, HIS 250, and completion of 24 of the required 27 hours of 300-level course work. Corequisite: HIS 499D. Immerses students in Social Studies Curriculum and Instruction in preparation for professional semester. Paired with HIS 499D, this course provides intense emphasis and preparation for teaching core content and implementation of content teaching skills. Fifteen field hours required at Rowan County Senior High School, including at least two hours of whole class teaching. Credits not applied to history major or minor.

HIS 476. Directed Study.
(3-0-3); on demand.
Prerequisite: consent of department chair.

HIS 499C. Senior Seminar in History.
(3-0-3); II.
Each student will complete a research project that integrates methodological and substantive aspects of the history discipline. Each student will prepare and present a paper to fellow students and a department committee. Course provides opportunity for review of professional and graduate opportunities. This course satisfies the integrative component for general education.

HIS 499D. Teaching Social Studies.
(3-0-3); I.
Prerequisites: HIS 250 and admission to TEP. Corequisites: HIS 451, completion of all general education requirements and 24 of the required 27 hours of 300-level coursework. Analysis of contemporary strategies and methods for secondary social studies instruction. Course will emphasize KDE standards and education reform. Teaching portfolio initiated with 15 hours spent in collaboration with a secondary school teacher. At least 3 field hours
will be spent in whole class instruction. Completion of the field experience requirement is an integral part of this course. Credits are not applied to history major or minor. This course satisfies the integrative component requirement for general education.

HLTH - Health Courses

HLTH 151. Wellness: Theory to Action.
(3-0-3); I, II, III.
Students will develop an understanding of the multifaceted nature of wellness, identify their current health status, acquire knowledge, and methods and/or techniques that can be used to promote positive change and optimal well-being. This course satisfies the SBS II requirement for general education.

HLTH 203. Safety and First Aid.
(3-0-3); I, II, III.
Safety education and first aid care for victims of accident or sudden illness.

HLTH 205. Psychological Health.
(3-0-3); II.
Prerequisite: PSY 154. Health psychology: foundations, biopsychosocial factors and psychoneuroimmunology perspectives.

(3-0-3); I, II.
Basic description of the elements of human nutrition, their function in the body, and food sources. Guide for healthy nutritional practices and nutritional needs throughout the life cycle. Equates with NUTR 201.

HLTH 230. Community Health.
(3-0-3); I.
Prerequisites: HLTH 151 and 160. Foundations of health as applied to the community: population, health promotion, health protection and health services.

HLTH 301. Health, Safety, and Nutrition for Early Elementary.
(3-0-3); I, II, III.
Prerequisite: HLTH 151. Educational theory and methods as applied to teaching health education to young children. Focuses upon content, resources, and methodologies. Laboratory experiences are an integral part of the course.

HLTH 310. Health and Wellness Promotion.
(3-0-3); I.
Prerequisites: HPE 160, NURA 103 or NURB 260. Emphasis on the study of the continual balancing of the different dimensions and the dynamic pursuit of holistic human needs — physical, spiritual, social, emotional, intellectual and occupational.

HLTH 360. Family Health.
(3-0-3); II.
Family and family living; nature of family, love, marriage preparation, marriage, and parenthood issues.

HLTH 377. Clinical and Field Experiences in School Health (P-12).
(0-4-2); I, II.
Prerequisites: admission to TEP, HPE 302 and 304. Clinical and field experiences related to planning, implementing, and evaluating health instruction.

HLTH 408. General School Safety.
(3-0-3); I, II, III.
Prerequisite: senior standing. An exploration of the principles and practices in establishing and maintaining a safe school environment. The course gives special emphasis to current issues that affect school safety as well as the relationship between safety and health.

HLTH 414. Principles of Epidemiology.
(3-0-3); I.
Prerequisite: senior standing. A study of the factors and causes of disease in a population for the purpose of its control and prevention. The course will introduce students to the discipline of epidemiology and its application to public health issues and practices with regard to both infectious and noninfectious disease processes.

HLTH 418. Use and Abuse of Drugs.
(3-0-3); I, II, III.
Prerequisite: senior standing. A survey of the field of psychoactive drugs with emphasis upon both the behavioral and health effects of these agents. Prevention and intervention options are also explored.

HLTH 425. Planning, Managing, and Evaluating Health/Wellness Promotion Programs.
(3-0-3); II.
Prerequisites: HLTH 310. The course emphasizes knowledge, methods in planning, designing, managing and improving health/wellness promotion programs.

HLTH 430. Consumer Health.
(3-0-3); II.
Prerequisite: junior or senior standing. Analysis of the selection, purchase, and use of various health-related products, services, insurance policies, and/or health care facilities which impact individual health throughout the life span.

(3-0-3); III.
Prerequisites: junior/senior standing and PSY 154. Focuses on conceptual framework and practical health counseling strategies and skills used in a variety of settings to help individuals initiate and maintain health-oriented behavior changes. Appropriate for individuals who plan to work in schools, human service agencies, private practices, healthcare organizations, business, or other environment which work with clients interested in changing lifestyle health behaviors.

HLTH 470. Practicum.
(0-24-15); I, II.
Prerequisites: senior standing and 2.5 or above overall and program content GPA, and HLTH 499C. Practical full-time experience under professional supervision in a selected and approved setting.

HLTH 471. Practicum.
(0-24-12); I, II.
Prerequisites: senior standing, 2.5 or above overall and program...
content GPA, and HLTH 499C. Practical full-time experience under professional supervision in a selected and approved setting.

HLTH 475. The School Health Program. (3-0-3); I.
All aspects of elementary and secondary level school health: philosophy, organization and administration, environment, services, education, evaluation, the school age child.

HLTH 477. Field Experience in Health. (0-6-3); I, II, III.
Prerequisite: HLTH 230. On-site work experience in a community health setting under qualified supervision. Laboratory experiences are an integral part of this course.

HLTH 480. Workshop. (1 to 3 hrs.); I, II, III.
Prerequisite: senior standing. The workshop format is an interactive learning experience designed to build and/or improve specific skills with a health perspective.

HLTH 489. Special Problems in Health. (1-3 hrs.); I, II, III.
Prerequisite: senior standing. Intensive study of approved, specific health problems, under direction of instructor.

HLTH 499C. Senior Seminar in Health Promotion. (3-0-3); I, II, on demand.
Prerequisite: senior standing in health promotion. Students are required to take this course in the fall semester prior to HLTH 470. The course is designed to document and refine student progress relative to the professional preparation and practice of health promotion. Each student will integrate theory with practice through the design and completion of a health promotion project and a student portfolio. Graduate and professional job opportunities will be explored. Students will complete preparation leading to placement in an approved agency for the HLTH 470 Practicum. This course satisfies the integrative component in health promotion for general education.

HON - Honors Courses

HON 100. Introduction to Honors. (1-0-1); I.
Prerequisite: admission to Honors Program. An introduction to the Honors Program at Morehead State University, with emphasis on coordinating the Honors experience with the major.

HON 200. The Ancient World. (3-0-3); II.
Prerequisite: admission to Honors Program. An interdisciplinary study of important books and ideas from ancient Greece and Rome, with an emphasis on students’ development of their ability to write critically about readings related to the humanities, social and behavioral sciences, and natural sciences. This course satisfies the core-writing II requirement for general education.

HON 205. Interdisciplinary Honors Core II: The Medieval World. (3-0-3); I.
Prerequisite: admission to Honors Program. An interdisciplinary study of the European Middle Ages, with emphasis on the literary and artistic achievements of the period, the religious and philosophical ideas implicit in the artworks, and the interaction of the Christian culture of medieval Europe with others, such as Islam. This interdisciplinary course satisfies the HUM I requirement for general education.

HON 210. Interdisciplinary Honors Core III: The Renaissance and Enlightenment World. (3-0-3); II.
Prerequisite: admission to Honors Program. A study of 16th, 17th and 18th century Western society and culture. This course will investigate Renaissance and Enlightenment concepts of national economy, population, government, and urban planning in relation to developments in fields such as art, literature, medicine, and theater. This interdisciplinary course satisfies the SBS II requirement for general education.

HON 215. Interdisciplinary Honors Core IV: The Modern World. (3-0-3); I.
Prerequisite: admission to Honors Program. An interdisciplinary study of seminal books and influential ideas from the humanities, social and behavioral sciences, and natural sciences of the 19th and 20th centuries that decisively shaped our world today, with an emphasis on the development of the methods, technological advances, and knowledge within discrete disciplines belonging to the natural sciences. This interdisciplinary course satisfies the NSC II requirement for general education.

HON 299. Self Education. (1-0-1); I, II.
Prerequisites: registration by petition only. Restricted to students in the Academic Honors Program. An independent class in which Honors students propose and carry out an approved study plan to learn material not covered in other courses at the University. May be repeated for credit.

HON 300. Honors-Enhanced Study. (1-0-1); I, II.
Prerequisites: registration by petition only. Restricted to students in the Academic Honors Program. An independent course, linked with a class in the student’s major or minor, in which students will carry out additional research or service work related to the linked class. May be repeated for credit.

HON 490. Senior Honors Project. (1-3 hrs); I, II.
Prerequisites: registration by petition only. Restricted to students in the Academic Honors Program. An independent project for Honors students, leading to a final paper or other appropriate product, along with a public presentation. May be repeated for credit up to a maximum of six hours.

HPE - Health and Physical Education Courses

HPE 160. Foundations of Health and Physical Education. (3-0-3); I, II.
History, principles, philosophy, outcomes, standards, and assess-
ments that establish the theoretical foundation of future health and physical education teachers, health and experienced science professionals.

**HPE 300. Methods of Teaching Elementary Physical Education.**
(2-2-3); I.
**Prerequisites:** PHED 212, PHED 218 and admission to TEP. **Corequisite:** HPE 300L. Educational theory, strategies and methods of teaching physical education at the elementary level. Emphasis on planning, implementing, and evaluating developmentally appropriate programs in physical education. Peer teaching, laboratory and supervised experiences in the public schools are integral parts of the course.

**HPE 301. Classroom Assessment in Health and Physical Education.**
(3-0-3); I, II.
**Prerequisite:** HPE 160. Methods, techniques, and procedures used in assessment of students in physical education and health education.

**HPE 302. Methods of Teaching Elementary Health.**
(2-2-3); I.
**Prerequisite:** admission to TEP. Corequisite: HPE 302L. Educational theory, strategies and methods of teaching health education at the elementary level. Emphasis on planning, implementing, and evaluation developmentally appropriate programs in health education. Peer teaching, laboratory and supervised experiences in the public schools are integral parts of the course.

**HPE 303. Methods of Teaching Secondary Physical Education.**
(2-2-3); II.
**Prerequisites:** PHED 215, PHED 214 and admission to TEP. Corequisite: HPE 303L. Educational theories, strategies, and methods of teaching physical education at the secondary level. Emphasis on planning, implementing, and evaluating developmentally appropriate programs in physical education. Peer teaching, laboratory and supervised experiences in the public schools are integral parts of the course.

**HPE 304. Methods of Teaching Secondary Health.**
(2-2-3); II.
**Prerequisite:** admission to TEP. Corequisite: 304L. Educational theories, strategies, and methods of teaching health education at the secondary level. Emphasis on planning, implementing, and evaluating developmentally appropriate programs in health education. Peer teaching, laboratory and supervised experiences in the public schools are integral parts of this course.

**HPE 499C. Senior Seminar in Health/Physical Education Teacher Education.**
(3-0-3); I, II.
**Prerequisites:** senior standing and admission to the professional semester in education. Corequisite: EDSE 416. A culminating experience in which candidates will review and apply the principles, strategies and theories applicable in the P-12 health and/or physical education classroom. Candidates complete a variety of experiences which will allow them to demonstrate mastery of Kentucky's Teacher Standards.

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**HUM - Humanities Courses**

**HUM 203. Medieval Culture**
(3-0-3); on demand.
**Prerequisite:** ACT of 18 or better in reading or the grade of "C" or better in EDEL 096. A writing-intensive and interdisciplinary course that provides students with the knowledge and the skills to study and analyze medieval culture, and by extension, other cultures radically different from their own. This interdisciplinary course satisfies the HUM I requirement for general education.

**HUM 250. American and Global Citizenship.**
(3-0-3); II.
**Prerequisite:** ENG 100 or equivalent. This course is a study of the history, conceptualization, and debates over national and global citizenship primarily in the United States. The class will investigate concepts of effective citizenship in debates over the Constitution, the struggles over the recognition of women, non-whites, and recent immigrants as citizens over the course of American history, and recent developments in multicultural and global citizenship. This class satisfies the SBS I requirement for general education.

**HUM 305. Good & Evil.**
(3-0-3); on demand.
**Prerequisite:** ENG 200. An interdisciplinary study of the nature of good and evil, including perspectives derived from areas such as philosophy, psychology, history, literature, art, etc.

**HUM 340. Health and the Hispanic Community: Cultural Perspectives.**
(3-0-3); I, II.
**Prerequisite:** sophomore standing. A foundation course for the development of cultural sensitivity through the examination of culturally diverse values and beliefs with a focus on the experience of Hispanic communities. The course includes individual projects where students will gather materials and develop skills needed to communicate with the Hispanic population of the United States.

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**IECE - Early Childhood Education Courses**

**IECE 301. At-Risk Infants and Toddlers I.**
(3-1-3); I.
**Prerequisites:** EDSP 230, EDEC 253 and IECE 311 or instructor consent. Development and causes of difficulties experienced by at-risk infants and toddlers, as well as early intervention approaches to be used with these children and their families. Completion of the required field experience is an integral part of this course.

**IECE 311. Introduction to Early Childhood.**
(3-1-3); I, II.
**Prerequisite:** EDF 207. How the learning environment is established to provide optimal learning experiences and to guide children in developing responsible behavior. Completion of the required field experience is an integral part of this course.

**IECE 345. Preschoolers with Special Needs.**
(3-1-3); II.
Prerequisite: admission to Teacher Education Program. This course will encompass the characteristics, needs, and assessment of exceptional children during the preschool years. Needs and involvement of families will be an important emphasis. Completion of the required field experience is an integral part of this course.

IECE 360. Families in Early Childhood Education. (3-0-3); I.
Prerequisites: EDF 207 and EDEC 253. This course provides theoretical and practical approaches to working with families in early childhood education programs, including families of at-risk and special needs children. Completion of the required field experience is an integral part of this course.

IECE 361. Positive Child Guidance. (3-1-3); II.
Prerequisites: EDF 207 and EDEC 253. This course provides positive strategies for guiding the behavior of young children. Candidates will learn both preventive and corrective discipline measures. Completion of the required field experience is an integral part of this course.

IECE 410. The Role of the Teacher: Designing Language and Cognitive Activities for Diverse Groups. (3-0-3); I.
Prerequisite: admission to TEP. One of a block of three courses that will focus on knowledge, skills, and methodology necessary to develop the role of the early childhood teacher. The focus of this course is the development of cognitive and language activities.

IECE 412. The Role of the Teacher: Designing the Implementation of Creative Play Activities for Young Children. (3-1-3); I.
Prerequisite: admission to TEP. The role of the early childhood teacher in implementing creative play activities for young children from birth to age five.

IECE 416. Infant/Toddler Program Planning. (3-1-3); I.
Prerequisites: EDEC 253, EDEE 305, IECE 311 and admission to TEP. This course investigates the needs and interests of infant and toddlers and develops professional views in selecting, implementing and designing appropriate teaching materials as well as instruction that can foster children’s growth in each developmental area-cognitive, aesthetic, emotional, social, and physical. Laboratory experiences are an integral part of this course.

IECE 418. Preschool Program Planning. (3-1-3); I.
Prerequisites: EDEC 253, EDEE 305, IECE 311 and admission to TEP. Investigates needs and interests of early childhood and provides opportunities to explore objectives, materials, and techniques of instruction for this age group. Laboratory experiences are integral parts of this course.

IECE 425. Clinical Practice: Infants & Toddlers and Preschool for 3-5 year olds. (12 hrs.); I, II.
Prerequisite: admission to Teacher Education Program. Placement in approved infant/toddler and in approved preschool settings for children ages 3-5 years for clinical semester to include observation, participation, and family support in accordance with Kentucky Interdisciplinary Early Childhood Education Standards. Special conferences with supervising teacher, attendance, and participation in faculty and out-of-school activities required.

IECE 457. Professional Assessment. (3-0-3); I, II.
Prerequisites: IECE 301, 345, 410, 411 and 412. This course has two components: assessment and certification portfolio preparation. Final course for students in the IECE certification preparation program, prior to the professional semester. Students will complete assessment for certification and finalize and professionalize their certification portfolio. Assessments required for teacher certification will be administered in this course.

IET - Industrial and Engineering Technology Courses

IET 100. World of Technology. (3-0-3); on demand.
An introduction to basic concepts of industry. The identification of the major industries and the development of an understanding of their impact upon society.

IET 101. Social Dimensions of Technology. (3-0-3); I, II.
The global community is being changed by technology at a rapid pace. As a result, thoughtful and meaningful considerations are necessary so that the use of technology reflects the shared needs and values of society. An understanding of how technology relates to society and how society relates to technology is vital if we want improvements in how we utilize our resources for society’s future prosperity. The course will provide historical and current examples and information, as well as future dimensions of technology’s impact on society. This course requires no specialized knowledge, but critical thinking skills will be emphasized, since students will be challenged to think about the implications of technology’s impact on society today and also expectations for the future. The mode of delivery will be a mix of lectures by the instructor, discussion, case studies, and group projects. There will also be guest speakers. Topics to be covered will include; History of Technology, Ethics and Technology, Energy and Technology, Health and Technology, and Future Impacts of Technology. This interdisciplinary course satisfies the SBS I requirement for general education.

IET 110. Fundamentals of Computer Technology. (3-0-3); I, II, III.
A general introduction to the computer systems. Basic hardware concepts are covered. Main topics include an overview of components of a computer, the components of system unit, operating systems and utility programs, communications and networks, the Internet and World Wide Web, Web development programs, e-commerce, and system maintenance. Designed for students who have some basic familiarity with Microsoft Office application.

IET 111. Basic Wood Technics. (2-2-3); on demand.
This is the beginning course in wood technology, consisting of theory and application with particular emphasis on individual and industrial values of secondary wood processing.

**IET 120. Technology Systems.**  
*(3-0-3); I, II, III.*  
Precollege curriculum requirements should be met. An introduction to major areas of technology including communication, construction, manufacturing, and transportation systems.

**IET 123. Concepts and Experiences in Energy.**  
*(3-0-3); I.*  
An interdisciplinary approach to the study of energy. Incorporates experiences and concepts from motion, heat, light, magnetism, electricity, radioactivity, and sound waves. Equates with PHYS 123, SCI 123, and SSE 123. *This course satisfied the NSC II requirement for general education.*

**IET 160. Introduction to Power and Fluid Mechanics.**  
*(2-2-3); I.*  
Beginning instruction in energy sources and fluid systems. Steam engines, steam turbines, diesel engines, spark-ignition engines, and exhaust emissions are studied.

**IET 200. Technology and Society.**  
*(3-0-3); I, II, III.*  
This course is designed to introduce students to the realm of technology and to increase their awareness of both the uncertainty and promise that arises when technology becomes a creative human enterprise. The course is intended to facilitate the integration of existing student views into a coherent and realistic perspective of a technological society. In addition to the innovations in technology, consideration will be given to the nature of technology and science, evolution of technology, philosophical views of technology, technology ethics, contemporary technological issues and concerns, technology risk assessment and the future outlook for science and technology. Several course activities focus on the roles individuals can play in the management and control of technological forces toward social progress. *This course satisfies the SBS II requirement for general education.*

**IET 211. Advanced Wood Technics.**  
*(2-2-3); on demand.*  
*Prerequisite: IET 111 or consent of instructor.* This is a continuation of IET 111. It consists of advanced techniques and practices reflecting the wood industries through the study and use of theory, experimentation, and evaluation.

**IET 222. General Crafts.**  
*(2-2-3); on demand.*  
A survey of several craft media, involving a study of the common tools, skills, processes, and procedures in clay, glass, plastics, metal, stone, leather, and wood. Industrial applications of craft principles and processes will also be investigated.

**IET 239. Cooperative Education I.**  
*(1-3); I, II, III.*  
Designed to develop professional and technical work experience in a business, educational and or industrial organization.

**IET 260. Hydraulics and Pneumatics.**  
*(2-2-3); II.*  
Introductory course in the design and analysis of power transfer devices utilizing hydraulics and pneumatics, with emphasis on robotics applications.

**IET 261. Power Mechanics.**  
*(2-2-3); on demand.*  
Control mechanisms are studied along with rocket engines, various forms of jet engines, and advanced power systems.

**IET 263. Technology Management I.**  
*(6-0-6); on demand.*  
Technical competencies in the field of specialization. Offered only for technology management students.

**IET 264. Technology Management II.**  
*(6-0-6); on demand.*  
Practical specialized technical skills in the related fields. Offered only for technology management students.

**IET 265. Technology Management III.**  
*(6-0-6); on demand.*  
Attainment of advanced technical skills. Offered only for technology management students.

**IET 300. Technology and Society.**  
*(3-0-3); I, II, III.*  
*Prerequisites: ENG 100 and MATH 123 or higher.* A study of the issues that arise as technology becomes a creative human enterprise. Students will be engaged in reading, dialog, and group activities in order to increase their abilities to identify and assess the implications and ramifications of productively living in a technological society.

**IET 307. Materials Science.**  
*(2-2-3); I, II.*  
*Prerequisites: MATH 152 or MATH 175 and PHYS 201/201A or PHYS 231/231A.* An organized investigation of engineering materials, including their classification, properties, and means of testing to determine their properties. The application of materials to manufactured and constructed products and the effects of manufacturing processes and in-service stress on materials will be considered.

**IET 310. Engineering Economic Analysis.**  
*(3-0-3); I.*  
*Prerequisites: ECON 101 or ECON 201, and MATH 175.* Engineering investment, decision analysis of alternate projects, machine depreciation methods, machine replacement policies, effect of taxes and inflation on engineering investment.

**IET 311. Design and Construction.**  
*(1-4-3); on demand.*  
*Prerequisite: IET 211.* Students design, plan, construct, and finish an appropriate product requiring knowledge of advanced principles and techniques in wood technology.

**IET 317. Just In Time and Lean Systems.**  
*(3-0-3); I, II.*  
*Prerequisite: ITMT 186.* Analysis of industrial production methods for profit improvement. Elements of lean manufacturing and just-in-time inventory control are covered.
IET 319. Quality Control.
(3-0-3); I, II.
Analytical and statistical inference techniques for process and manufacturing product control.

IET 320. Industrial Project Management.
(3-0-3); I, II.
Prerequisites: IET 110, 120 and ENG 200 or consent of instructor.
A study of industrial project management methods for the analysis and design of industrial-level projects. Content includes planning, scheduling, and control of project resources from an industrial perspective. Concepts and activities are integrated according to the Project Management Institute’s Body of Knowledge.

IET 321. Wood Laminating and Turning.
(2-2-3); on demand.
Theory and practice of laminating and wood turning, with emphasis given to industrial and school shop practices. Introduction to tools, equipment and their safe operations.

IET 327. Applied Industrial Management.
(3-0-3); II.
A study of basic industrial management practices and procedures. Designed to serve the technician, first-line supervisor, or lay management individual to provide an awareness rather than to prepare a practitioner of management.

IET 330. Industrial Design.
(2-2-3); I, II.
Prerequisites: junior/senior standing and all 100 level IET core courses and all departmental specific general education MATH requirements met. Conduct design with emphasis on consumer demands. The key principles, elements and precepts of modern design with heavy emphasis on the design methodology in both collaborative and individual settings.

IET 339. Cooperative Education I.
(1 to 3 hrs.); I, II, III.
Designed to develop professional and technical work experience in a business, educational, and/or industrial organization.

IET 361. Automotive Mechanics.
(2-2-3); on demand.
Engine repair and maintenance procedures including computerized management systems. Braking systems, drive systems, and steering systems are also covered.

IET 362. Fluid Power.
(2-2-3); on demand.
To gain an in-depth knowledge of fluid systems as they are used in modern industry.

IET 365. Instrumentation.
(2-2-3); on demand.
Techniques of properly instrumenting test calls with such devices as pilot tubes, manometers, and electronic devices.

IET 371. Seminar for Industrial Education and Technology.
(1-0-1); I, II.
Participants will develop a further understanding of the underlying concepts of industrial career options by participation in one or more programs followed by informal discussion.

IET 385. Staff Exchange.
(3 hrs.); I, II, III.
Designed to give an opportunity for an individual to upgrade in his/her specific technical skill in an ever changing technical world. Through this unique chance to work in industry learning the new techniques, developing new skills and expanding one’s knowledge will enable the participant to take back to his/her classroom the latest innovations in technology as industry has adopted for their use.

IET 387. Fundamentals of Metallurgy and Joining Technology.
(2-2-3); I, II.
Pressure, non-pressure, and brazing processes for material fabrication. Arc, oxyacetylene, inert gas, and special welding techniques. Coupon analysis required for destructive and nondestructive testing.

IET 389. Applied Metallurgy.
(3-0-3); I, II, III.
Prerequisites: IET 320 and 330, or consent of instructor. An enrichment program which will give experience in an area where it is not possible to have this experience in a classroom environment. Student will work under supervision in an area of their major department. A representative of the cooperating organization will be directly responsible for the work experience of the student and will make a written evaluation of the student periodically.

IET 398. Supervised Work Experience.
(1 to 9 hrs.); I, II, III.
Prerequisites: 20 hours in major department and consent of department chair prior to registration. An enrichment program which will give experience in an area where it is not possible to have this experience in a classroom environment. A representative of the cooperating organization will be directly responsible for the work experience of the student and will make a written evaluation of the student periodically.

IET 399. Selected Topics.
(1 to 4 hrs.); on demand.
Technology and industrial teacher education topics reflective of emerging industrial techniques or trends in technical-vocational education. Innovative, experimental, and hands-on techniques will frequently be used.

IET 411. Wood Tech Ins.
(2-2-3); on demand.
Prerequisites: IET 111 and 211. A study of the problems and processes of the major wood industries in the United States. Various industrial processes, application, and testing are utilized in mass production and individual projects.

IET 419. Total Quality Improvement.
(3-0-3); I.
Prerequisites: IET 319 and 320, or consent of instructor. A study of total quality concepts and their impact on the quality and competitiveness of products.

IET 421. Design of Experiments.
(3-0-3); II.
Prerequisite: IET 419. The course introduces concepts, principles, and techniques used in designing, conducting, and analyzing experiments for industrial applications and applied research. Emphasis is given to product and process design, process improvement and quality engineering. Topics include simple comparative experiments, ANOVA, randomized block and Latin squares, facto-
rrial design, blocking and confounding factors, fitting regression models, and response surface.

IET 422. Industrial Safety Standards and Enforcement.
(3-0-3); I, II.
A study of industrial safety codes, standards, regulations, and enforcement procedures. Explanations of worker safety as related to attitude and production. Review of current laws regulating safety and those agencies related to enforcement and training.

IET 430. Facilities Planning.
(3-0-3); I.
Prerequisite: IET 320. The study of concepts, principles and techniques used in planning, designing and analyzing industrial facilities with emphasis on manufacturing and services.

IET 439. Cooperative Education II.
(1 to 6 hrs.); I, II, III.
Designed to develop professional and technical work in a business, educational and/or industrial organization.

IET 460. Internal Combustion Engines II.
(2-2-3); on demand.
Detailed study of exhaust emissions and the gas turbine engine.

IET 463. Heating, Ventilating, and Air Conditioning.
(2-2-3); on demand.
A study of the ventilating and heating techniques in modern industrial application. Also includes industrial air conditioning and refrigeration.

IET 476. Special Problems.
(1 to 3 hrs.); I, II, III.
Prerequisites: upper division standing; consent of department chair. Designed for the purpose of permitting a student to do advanced work as a continuation of an earlier experience or to work in an area of special interest.

IET 496. Organization and Management of the Laboratory.
(2-0-2).
Principles of shop and class organization and management, including program planning and development of shops and laboratories; selecting and purchasing equipment and supplies; and organizing and administering the instructional program.

IET 499C. Senior Project.
(1-4-3); I, II.
Prerequisites: senior standing and completion of 18 hours in option. Problems using the scientific method of inquiry in conjunction with faculty members from the major area of study will be conducted. The proposed problem is inclusive of the statement, background, and parameters of the problem, as well as methods and procedures for the solution. This course satisfies the integrative component for general education.

IMS - Imaging Sciences Courses

IMS 100. Orientation to Health Care Professions.
(1-0-1); on demand.
A study of career opportunities available in health care, the stand-ard program requirements and an overview of the job responsibilities. Equates with NAHS 100 and NUR 100.

(2-0-2); I, II.
The study of vocabulary components and terms related to sciences and medicine. Previous knowledge of medicine or related discipline is not necessary. Equates with NAHS 202 and NUR 202.

IMS 300. Ethical and Legal Issues in Health Care.
(3-0-3); I, II.
This course is an overview of the ethical and legal issues in today's health care environment. Emphasis includes such areas of discussion as confidentiality, HIV/AIDS, artificial life support, euthanasia, abortion, genetic science, allocation of resources and professional gatekeeping. Equates with NAHS 300 and NUR 300.

IMS 301. Selected Topics.
(1 to 3 hrs.); on demand.
Investigation of specific topics of interest related to nursing and/or allied health sciences.

IMS 302. Health Maintenance Throughout the Life Span.
(3-0-3); on demand.
This course is designed to increase one's awareness of the importance of health maintenance throughout the life span. Emphasis will be on the concepts of health maintenance through health promotion and illness prevention strategies for all stages of the life span. Equates with NAHS 302 and NURS 302.

IMS 303. Women's Health Care.
(3-0-3); on demand.
Increase one's awareness of the importance of women's health care in all dimensions. Emphasis will be placed on health maintenance issues for women that include women's developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns. Equates with NAHS 303, NURS 303 and WST 303.

IMS 304. Men's Health Issues.
(3-0-3); on demand.
This course is designed to increase one's awareness of the importance of men's health issues in all dimensions. Emphasis will be placed on health maintenance issues for men that include men's developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns. Equates with NAHS 304 and NURS 304.

IMS 321. Introduction to Multidisciplinary Health Services.
(3-0-3); on demand.
Restriction: admission to the University Studies — Health Service degree program or admission to the Bachelor of Imaging Sciences online degree program. A study of various health careers focusing on the roles and responsibilities, levels of education and credentialing, daily functions, and career advancement options.
IMS 331. Issues and Trends in Health Care Delivery Systems,  
(3-0-3); on demand.  
Restriction: admission to the Bachelor of Imaging Sciences online degree program. This course is a survey of health care delivery in the United States, which will allow students to gain a more global picture of health care and public health services. Equates with NURS 331.

IMS 341. Sectional Anatomy for the Medical Imaging Professional,  
(3-0-3); on demand.  
Restriction: admission to the Bachelor of Imaging Sciences online degree program. This course is designed to provide a solid foundation for acquiring knowledge of sectional anatomy utilized in the medical imaging profession. Emphasis will be placed on imaging planes and a systematic approach and evaluation of sectional anatomy as visualized by various imaging modalities.

(3-0-3); on demand.  
Through this course, the student will develop a global awareness of societal aspects of health and disease through the critical examination of the sociopolitical constraints in health and health care of populations. The roles of community, national, and international health organizations will be examined. Meets general education requirement in the area of social and behavioral sciences. Equates with IST 345, NAHS 345 and NURS 345.

IMS 351. Picture Archiving and Communication Systems.  
(3-0-3); on demand.  
Restriction: admission to the Bachelor of Science in Imaging Sciences online degree program. Picture Archiving and Communication Systems (PACS) are now part of the fundamental technological infrastructure supporting radiology practice in the digital age. This course is an introduction to concepts of PACS, networking fundamentals, DICOM, image acquisition, and the equipment used. Legal issues and formal PACS policies will also be discussed.

IMS 361. Leadership for the Health Care Professional.  
(3-0-3); on demand.  
Restriction: admission to the University Studies — Health Service degree program or the Bachelor of Imaging Sciences online degree program. This course provides students with a knowledge base and foundations for the study and practice of leadership in health care systems. Emphasis is placed on the theories of leadership, structures of organizations in health care, and the effective/efficient use of human and material resources. Equates with NAHS 361 and NURS 361.

IMS 401. Health Care Law and Policy.  
(3-0-3); I.  
Restriction: admission to the Bachelor of Science of Imaging Sciences online degree program. This is a survey of the law and policy of health care, covering the history of health care law and policy, the fundamental principles of law as applied to health care, and the federal and state legislation and regulations related to health care.

IMS 421. Program Planning, Evaluation and Assessment.  
(3-0-3); I.  
Restriction: admission to the Bachelor of Imaging Sciences online degree program. This course is designed to provide a foundation for developing educational programs in medical imaging sciences. Emphasis will be placed on program development, accreditation, and evaluation.

(3-0-3); on demand.  
Restriction: admission to the Bachelor of Science of Imaging Sciences online degree program. An in-depth study of the operations of the imaging sciences department. The course will focus on improving productivity and other areas of performance within the healthcare setting.

IMS 471. Teaching Methodologies in Imaging Sciences.  
(3-0-3); on demand.  
Restriction: admission to the Bachelor of Science of Imaging Sciences online degree program. This course focuses on learning styles and teaching techniques with emphasis on effective presentation strategies for managers and educators in the medical imaging professions.

IMS 473. Health Care Management of Children.  
(3-0-3); on demand.  
Open to any interested student. Promotion of wellness of children and adolescents with emphasis on meeting the health care needs of children in the classroom and home. Discussion of basic first aid, common acute and chronic illness in children. Equates with NAHS 473 and NURS 473.

(3-0-3); on demand.  
Open to any interested student. A study of the biopsychosocial factors inherent with the sexuality of human beings and their influences on behavior. Equates with NAHS 475 and NURS 475.

IMS 481. Fiscal Management in Health Care.  
(3-0-3); on demand.  
Restriction: admission to the Bachelor of Science of Imaging Sciences online degree program. A study of the concepts of economics and financial management in the health care arena, including budgeting, breakeven analysis, financial reporting, and business plan preparation.

(3-0-3); on demand.  
Restriction: admission to the Bachelor of Science of Imaging Sciences online degree program. A study of the principles of course development and strategies for planning, development, and implementation of curricula in Imaging Sciences.

IMS 499C. Senior Seminar in Imaging Sciences.  
(3-0-3); II.  
Restriction: admission to the baccalaureate imaging sciences program. An integrated capstone course designed to forge an interdisciplinary learning experience centered on leadership, business management, teaching/learning and health care regulation as-
pects in medical imaging. Students interact as both participants and presenters in a seminar environment where various diagnostic imaging modalities are represented. Emphasis is on preparation for a leadership career in medical imaging. This course satisfies the integrative component for general education.

**IST - International Studies Courses**

Equated courses can only be taken once for credit. If an equated course is taken a second time using the different prefix, it will be considered a repeat.

**IST 101. Introduction to International Studies.**

(3-0-3); I, II.

An exploration of global citizenship through the interdisciplinary perspectives of the humanities, technology, education, science and economics. Students will be challenged to critically examine the relationship of intercultural and international issues, and to use problem-solving skills as they investigate topics and issues of universal concern. This interdisciplinary course satisfies the SBS II requirement for general education.

**IST 197. World Languages I.**

(3-0-3); on demand.

An introductory course in a language not usually offered at the University. May be repeated for credit as topic varies.

**IST 198. World Languages II.**

(3-0-3); on demand.

Prerequisite: IST 197. A second semester course in a language not usually offered at the University. May be repeated for credit as topic varies.

**IST 201. Global Studies.**

(3-0-3); I, II.

This course will introduce students to the study of world cultures and provide an understanding of contemporary global issues. Using historical and literary texts, CD-ROM technology and films in a multimedia approach, students will examine selected social, political, economic, and cultural phenomena in the context of world history. Equates with HIS 201.

**IST 204. World Food.**

(3-0-3); I, II, III.

Analysis of contemporary problems and issues of public concern relating to food, agriculture, and rural areas using the tools of fundamental economic concepts. Farm income, food prices, world food problems, natural resources, environment, and rural development issues will be studied. Equates with AGR 204.

**IST 205. French Culture and Civilization.**

(3-0-3); II.

Survey of art, architecture, music and history of France. Cuisine, fashion, and cinema. The imprint of France on America and the Third World. Taught in English; some knowledge of French helpful but not required. Equates with FRN 205.

**IST 206. Business French.**

(3-0-3); I, II.


**IST 211. Introduction to World Literature I.**

(3-0-3); I.

A comparative study of dramatic, lyric, and narrative ancient literatures. Equates with ENG 211.

**IST 212. Introduction to World Literature II.**

(3-0-3); II.

A comparative study of dramatic, lyric, and narrative literatures of the world after the 16th century. Equates with ENG 212.

**IST 221. World Religions I.**

(3-0-3); on demand.

Prerequisite: PHIL 200. Origin, development, assumptions, values, beliefs, practices, great leaders, and principal events of Judaism, Christianity, Islam, and Zoroastrianism. Equates with REL 221.

**IST 222. World Religions II.**

(3-0-3); on demand.

Prerequisite: PHIL 200. Origin, development, assumptions, values, beliefs, practices, great leaders, and principal events of Hinduism, Buddhism, Confucianism, Taoism, Jainism, Sikhism, and Shintoism. Equates with REL 222.

**IST 246. Art History II.**

(3-0-3); I, II.

An examination of ancient Greek and Roman, and Medieval art. It includes a study of materials, techniques, subjects, styles, issues, functions and meanings. Equates with ART 264.

**IST 265. Art History III.**

(3-0-3); I, II.

An examination of art from the Renaissance to the present. It includes a study of materials, techniques, subjects, styles, issues, functions, and meanings. Equates with ART 265.

**IST 300. World Geography.**

(3-0-3); I, II.

A general survey of the human and physical geography of the major regions of the world with a concentration on development. Emphasis is on the interaction between individuals and the physical and cultural landscape in various settings. Equates with GEO 300.

**IST 301. International Studies Study Abroad.**

(0-1-1); I, II, III.

Prerequisites: IST 101 and consent of the coordinator of International Studies or the chair of International and Interdisciplinary Studies. This class will provide the student with experience in a foreign country for a minimum of a two-week period. A study abroad experience may be through one of the study abroad consortia in which Morehead State holds membership or through a pre-approved study trip. Prior application for IST 301 should be made to the associate dean for international education.

**IST 302. Politics of the Middle East and North Africa.**

(3-0-3); II, alternate years.

Prerequisites: GOVT 230 and 289. Analysis of major themes and
cases in Middle Eastern/North African politics. Includes issues of religion, ethnic conflict, modernization, and democratization. Equates with GOVT 331.

**IST 303. Politics of Latin America and the Caribbean.**
(3-0-3); I, alternate years.
Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in Latin American/Caribbean politics. Includes issues of debt, development, and democratization. Equates with GOVT 332.

**IST 304. Politics of Sub-Saharan Africa.**
(3-0-3); on demand.
Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in African politics. Includes issues of debt, development, and democratization. Equates with GOVT 333.

**IST 305. Cultural Anthropology.**
(3-0-3); I, II.
Prerequisite: BIOL 105, SOC 101, or consent of instructor. A study of literate and nonliterate cultures using the ethnographic approach. Universal aspects of human experience, including the family, economic, political and religious systems examined in cross-cultural perspective. Equates with WST 305 and SOC 305.

**IST 306. International Relations.**
(3-0-3); I, alternate years.
Prerequisite: GOVT 289 or consent of instructor. A study of international relationships in theory and practice; concepts of power and its application; machinery of foreign policy making and implementation; world politics and law; and the world community. Equates with GOVT 364.

**IST 307. Politics of International Economic Relations.**
(3-0-3); I, alternate years.
Prerequisite: GOVT 289. Study of essential issues and contending analytical frameworks. Includes examination of politics of economic relations of the U.S., Japan, Europe, and between the “North” and “South.” Equates with GOVT 367.

**IST 310. Australia.**
(3-0-3); on demand.
Resources of Australia, New Zealand, and islands of the Pacific; significance of position and political connection of these lands. Equates with GEO 310.

**IST 311. Geography of the Global Economy.**
(3-0-3); on demand.
Prerequisite: GEO 211. Spatial analysis of higher level economic activities. Focus is on wholesaling, interregional and international trade and transportation, producer services, and investment. Equates with GEO 311.

**IST 312. Islamic Cultures of Africa.**
(3-0-3); II.
A study of the sociopolitical impacts of Islam on African societies from the 7th century to the present, and of the cultural adaptations and self-appropriations of Islamic traditions by selected African communities and/or states across the major regions of the continent.

**IST 321. Eastern Philosophy.**
(3-0-3); on demand.
An examination of the major philosophical theories of Hinduism, Buddhism, Confucianism, and Taoism. Equates with PHIL 320.

**IST 324. Geography of World Religions.**
(3-0-3); on demand.
Prerequisite: GEO 100 or 300. Analysis of the distributions and geographic patterns of modern religions. Particular attention is paid to the geographic patterns that were created as a result of and that helped to create the rituals and traditions of the major world religions. Equates with GEO 370.

**IST 325. Religious Literature of the World.**
(3-0-3); on demand.
The literature of major religions of the world. Equates with ENG 325.

**IST 326. Cuba and the Caribbean.**
(3-0-3); on demand.
The people and places of the Caribbean basin with a concentration on climate, culture, economics and tourism. A special focus will address the dynamics of Cuban socioeconomic development. Equates with GEO 326.

**IST 328. Africa.**
(3-0-3); on demand.
Resources, both natural and cultural; changing political conditions and affiliations of African countries, recognition of, and reasons for, the growing importance of this continent in world affairs. Geographic factors in the economic, social, and political structure of Europe; emphasis on natural regions, resource distribution, and industrial development. Equates with GEO 328.

**IST 329. North American Politics: United States and Canada.**
(3-0-3); I, III.
A comparative study of the governments and politics of the United States and Canada, their political cultures, public opinion, interest groups and political parties; the evolution, structure, and operation of their governments, the behavior of their public officials, and their public policies. Equates with GOV 329.

**IST 330. Perspectives on Canada.**
(3-0-3); I, II.
A multidisciplinary study of the geography, history, society, politics, and economy focusing on contemporary Canadian domestic and international issues, including Quebec's role in the Canadian federation, transborder economic and cultural relationships with the United States, and Canada's participation in world affairs.

**IST 331. History of Canada.**
(3-0-3); II.
Prerequisite: consent of instructor. A study of Canada's intellectual, political, economic, and social development, including its colonial origins, the creation and evolution of its confederation, and the nature of its involvement in international affairs. Equates with HIS 336.

**IST 332. First Nations of Canada.**
(3-0-3); II.
A comparative study of representative North American Native cultures focusing on first nations of Canada, including Ojibwe, Huron, Cheyenne, Lillooet, Nootka, Dene, and Inuitt, and using
ethnographic, ethnohistoric, and anthropological models.

**IST 333. Government and Politics of Britain and Canada.**
(3-0-3); II.
A comparative study of the parliamentary governments of Canada and Great Britain, their political cultures, public opinions, interest groups and political parties; the evolution, structure, and operation of their constitutional governments, the behavior of their public officials, and their public policies.

**IST 334. Comparative Constitutional Law and Politics.**
(3-0-3); I, alternate years.
*Prerequisite: GOVT 230 and 289.* A comparative cross-national study of constitutional law and politics with particular emphasis on governmental powers and individual rights issues in the United States, Great Britain, Canada, and Germany. Equates with GOVT 303.

**IST 335. Political Economy and Environmental Policy in Canada.**
(3-0-3); I.
A study of political dimensions of the Canadian economy and Canada’s domestic and international environmental policies, including U.S. Canadian environmental issues and Canada’s role in crafting international environmental policies.

**IST 336. Politics of the North American Auto Industry.**
(3-0-3); I.
A study of the politics of United States and Canadian automobile industries focusing on its managerial practices, labor relations, the recruitment of Japanese auto manufacturers and the challenge of their production methods to the North American auto and its labor unions, and their responses.

**IST 337. Politics of Asia.**
(3-0-3); on demand.

**IST 338. Russia and Eastern European Governments.**
(3-0-3); II.
*Prerequisite: GOVT 230 and 289.* A study of the Russian political system; its ideological base, governing structures, and political processes; and an analysis of the major Eastern European governments and their political life. Equates with GOVT 334.

**IST 340. Spanish Culture and Civilization.**
(3-0-3); on demand.
*Prerequisite: SPA 202.* Study of the architecture, history, literature, music, customs, current events, and ways of life in Spain. Equates with SPA 304.

**IST 341. Latin American Culture and Civilization.**
(3-0-3); on demand.
*Prerequisite: SPA 202.* Study of the architecture, art, geography, history, literature, music, customs, current events, and ways of life on the Latin American world. Equates with SPA 306.

**IST 345. Global Health.**
(3-0-3); I, II.
Through this course, the student will develop a global awareness of societal aspects of health and disease through the critical examination of the sociopolitical constraints in health and health care of populations. The roles of community, national, and international health organizations will be examined. Meets general education requirement in the area of social and behavioral sciences.

**IST 350. Communication, Culture and Diversity.**
(3-0-3); I, II.
*Prerequisite: COMM 108.* An examination of speech communication theory and skills useful under conditions of cultural diversity with a focus on the improvement of communication across cultural and group verbal and nonverbal language systems. Equates with COMM 350.

**IST 351. England to 1688.**
(3-0-3); I.
*Prerequisite: HIS 250.* The political, social, and economic institutions of England through the fall of the Puritan Commonwealth. Equates with HIS 351.

**IST 352. England since 1688.**
(3-0-3); II.
*Prerequisite: HIS 250.* Study of England from the Restoration to the rise of the British Commonwealth. Equates with HIS 352.

**IST 353. Russia to 1917.**
(3-0-3); I.
*Prerequisite: HIS 250.* The story of Russia from Kievan times to the overthrow of the Romanov dynasty. Equates with HIS 353.

**IST 354. Russia since 1917.**
(3-0-3); II.
*Prerequisite: HIS 250.* Detailed account of Soviet Russia from revolution through the end of the Cold War. Equates with HIS 354.

**IST 355. Modern Germany.**
(3-0-3); on demand.
*Prerequisite: HIS 250.* History of Germany from unification to the present in the context of European and world events. Equates with HIS 355.

**IST 358. Revolutionary Europe.**
(3-0-3); on demand.
*Prerequisite: HIS 250.* History of Europe from the Age of Absolutism to the collapse of the Napoleonic Empire. Equates with HIS 358.

**IST 359. Nineteenth Century Europe.**
(3-0-3); on demand.
*Prerequisite: HIS 250.* The politicians, nationalist trends, and unification movements leading to World War I. Equates with HIS 359.

**IST 360. United Nations and World Organizations.**
(3-0-3); II.
*Prerequisites: GOVT 230 and 289.* A study of the evolution of international organizations from the League of Nations to the United Nations and of the contemporary problems and issues of pre-
sent world organizations. Equates with GOVT 360.

**IST 361. Twentieth Century Europe.**
*(3-0-3); on demand.*
*Prerequisite: HIS 250.* Detailed survey of World War II, the Cold War, and contemporary events. Equates with HIS 361.

**IST 362. Current World Problems.**
*(3-0-3); I, III.*
A study of major international problems since World War II, with emphasis on Russian-American relations, regional political conflicts, and major world issues including food, population, and human rights policies. Equates with GOVT 362.

**IST 368. Human Rights and Global Justice.**
*(3-0-3); I.*
*Prerequisite: GOVT 289.* A study of the human rights idea; human rights movement; national and international human rights charters and organizations; political, civil, social, and economic rights; rights of women, children, and minorities; and human rights remedies for collective violence, genocide and terrorism. Equates with GOVT 368.

**IST 370. African History.**
*(3-0-3); II.*
*Prerequisite: HIS 250.* Focus on early African states, the slave trade era, the rise and fall of imperial empires, and post independence events. Equates with HIS 370.

**IST 371. Traditional China.**
*(3-0-3); I.*
*Prerequisite: HIS 250.* Survey of early Chinese civilization and its institutions. Equates with HIS 371.

**IST 372. Modern China.**
*(3-0-3); II.*
*Prerequisite: HIS 250.* Survey of Chinese history since the 19th century. Equates with HIS 372.

**IST 373. Japanese Civilization.**
*(3-0-3); on demand.*
*Prerequisite: HIS 250.* Survey of Japanese history from the beginning of its civilization to its rise as a world power. Equates with HIS 373.

**IST 374. The Middle East.**
*(3-0-3); on demand.*
*Prerequisite: HIS 250.* Survey of the Moslem world beginning with the eighth century and culminating in the present Middle Eastern situation. Equates with HIS 374.

**IST 379. Latin American History.**
*(3-0-3); on demand.*
*Prerequisite: HIS 250.* The Indian background, the rise and fall of the Iberian empires, and major events since independence. Equates with HIS 379.

**IST 383. Asia.**
*(3-0-3); on demand.*
The human-land relations characterizing this large and diverse region. An evaluation of a continent in the midst of change in terms of geographic potentials. Equates with GEO 383.

**IST 385. The Middle East.**
*(3-0-3); on demand.*
A study of the Middle East, its neighbors, and Islam with a focus on the physical resources, religious divisions, cultural groups and the geopolitics of the region. Equates with GEO 385.

**IST 399. Selected Topics in International Studies.**
*(3-0-3); I, II.*
*Prerequisite: IST 101.* Special course which supplements regular course offerings. May be repeated if the subtitle indicates that a different course is being offered.

**IST 401. Seminar in International Studies.**
*(3-0-3); II.*
*Prerequisites: IST 101 and nine hours of IST classes or consent of director of international studies.* Analysis and discussion of problems and issues in international studies. With guidance of international studies faculty, students will prepare and present a major research project that applies an international context to their major disciplines/areas of study.

**IST 409. International Management.**
*(3-0-3); on demand.*
*Prerequisite: MNGT 301.* A global view of management within various cultures and countries. The course covers international competition, cross-national ethics, international strategy, cross-cultural management, international human resources, and international leadership. Equates with MNGT 409.

**IST 430. Canadian Parliament Internship.**
*(3-0-3); III.*
A five-week summer internship with a member of the Canadian Parliament in Ottawa. Prior approval of the internship supervisor is required.

**IST 447. International Economics.**
*(3-0-3); on demand.*
*Prerequisite: ECON 101 or higher.* International trade theory, international monetary relationships, and the balance of payments. Emphasis is placed on contemporary problems and possible solutions. Equates with ECON 447.

**IST 469. International Marketing.**
*(3-0-3); II.*
*Prerequisite: MKT 304.* The role of the United States in the competitive arena of world trade. Preparing students to operate and compete globally; how to find new markets to replace saturated markets, how to determine which products international customers want, how to customize products for these demands, how to best reach these customers, what pricing strategies are most appropriate, what distribution channels are adequate, and how to overcome barriers that hinder implementation of marketing programs. Equates with MKT 469.

**IST 481. German Art of the 20th Century.**
*(3-0-3); on demand.*
*Prerequisite: consent of instructor.* This course will examine the visual expression of German, Austrian, and Swiss artists of the 20th century, including Die Brucke, Der Blaue Reiter, Dada, Neue Sachlichkeit, Surrealism, Bauhaus, art of National Socialism, and postwar developments in the art of both West and East Germany. Particular emphasis will be placed on art and artists in relation-
ship to political and social events of the time, especially the two
World Wars, the rise of National Socialism, and the Cold War.
Equates with ART 481.

**IST 482. Contemporary World Art.**
**(3-0-3); on demand.**
This course will provide a worldwide survey of contemporary vis-
ual arts in historical context and will explore current issues in
contemporary art. Equates with ART 482.

**IST 499C. Senior Seminar.**
**(3-0-3); I, II.**
This class is the senior capstone course for International Studies
Majors. During the semester, students will sharpen their analyti-
cal skills and discuss the problems and issues in international
studies. Building on the overseas experience, students will also
share their experience with other students at MSU. Students who
complete this course will gain a better understanding of how our
region is shaped by the world around us. This course satisfies the
integrative component for general education.

**ITCD - Industrial Technology - Computer Aided Design Courses**

**ITCD 103. Computer Aided Design and Drafting I.**
**(2-2-3); I, II.**
The study and application of producing two and three dimen-
sional drawings with CAD. Costs, software applications, ad-
vantages and disadvantages of a CAD system are also discussed.

**ITCD 203. Computer Aided Design and Drafting II.**
**(2-2-3); II.**
Prerequisite: ITCD 103. Breadth and depth are derived from the
background of principles and techniques developed previously in
technical drawing. Focus on working drawings.

**ITCD 215. Introduction to 3D Design and Modeling.**
**(2-2-3); I, II.**
Prerequisite: ITCD 103 or consent of instructor. This course facil-
itates learning to create 3D drawings of objects, parts, and assem-
blies through typical CAD and parametric procedures.

**ITCD 301. Tool and Equipment Design.**
**(2-2-3); I, even years.**
Prerequisites: ITCD 103 and MATH 152 or higher. The layout and
design of tooling, jigs, fixtures, gages, and equipment through computer aided design techniques.

**ITCD 305. Residential Architectural Design.**
**(2-2-3); I, odd years.**
Prerequisites: ITCD 103 and MATH 152 or higher. Instruction centers around the problems, practices, and techniques of the
residential architectural design and drafting, including historical
development.

**ITCD 315. 3D Design, Modeling and Animation.**
**(2-2-3); II.**
Prerequisite: ITCD 215 or consent of instructor. Content will in-
clude advanced dimensioning techniques, utilization of attrib-
utes, parametric modeling, illustration, presentations, animation,
and programming.

**ITCD 403. Computer Aided Design of Mechanisms.**
**(2-2-3); II, odd years.**
Prerequisites: ITCD 315 and MATH 152 or MATH 175. Mathemat-
ical and graphic solution of problems involving the principles of
machine elements. A study of motion of linkages, velocities, and
acceleration of points within a link mechanism; layout methods
for designing cams, belts, pulleys, gears and gear trains.

**ITCD 404. Commercial Architectural Design.**
**(2-2-3); II, even years.**
Prerequisites: ITCD 215 and MATH 152 or higher. A technical
course covering the fundamental principles, techniques, and
practices of commercial architectural design and drafting.

**ITCD 405. Civil Drafting.**
**(2-2-3); II, odd years.**
Prerequisites: ITCD 103 and MATH 152 or higher. Computerized
drawings involving roadways, bridges, large developments, plats,
and deeds.

**ITCD 415. Advanced Computer Aided Design.**
**(3-0-3); I, even years.**
Prerequisites: senior computer aided design or consent of instruc-
tor. The purpose of this course is to extend students’ knowledge
and skills in the design, modeling, analysis, and simulation of
spatial problems found in industrial, civil, or architectural envi-
ronments. Topics include customization and lisp routines, basic
finite element analysis, geometric dimensioning and tolerancing,
prototype development and interfacing with computer aided
manufacturing, and advanced development of movies for civil
and architectural projects.

**ITCG - Industrial Technology - Computer Graphics Courses**

**ITCG 102. Graphic Arts I.**
**(2-2-3); I.**
A survey course covering the broad practices, techniques and
problems of the graphic arts industry. Study and experience in-
clude history, design and layout, composition methods, image
reproduction, screen process and bindery applications.

**ITCG 202. Graphic Arts II.**
**(2-2-3); II.**
Prerequisite: ITCG 102. An advanced course for students to apply
the principles and competencies developed in the initial course.
Units include automatic press operation (letterpress and offset),
bindery operations, and darkroom procedures for photography
and photographic screen process applications to the graphic arts
industry.

**ITCG 302. Offset Lithography.**
**(2-2-3); II.**
The study of the history and fundamentals of photo offset lithog-
raphy in the graphic arts industry. Experience is achieved in copy
(hot or cold type), darkroom procedures (line copy and halftone
film developing), stripping/plate making, press operation, and
other facets relating to the industry.
ITCG 303. Computer Imaging and Illustration. (2-2-3); II.
Prerequisite: ITCD 103. A study of the principles, practices and techniques used in industry to illustrate complex mechanisms in pictorial form.

ITCG 322. Electronic Imaging and Photography. (2-2-3); on demand.
Introductory course emphasizing the techniques and mechanics of photography as they apply to composition and darkroom procedures. Students will provide their own equipment and supplies (focusing camera, film, and enlarging paper).

ITCG 350. Electronic Composition I. (2-2-3); I, even years.
An introductory course of theory and practical involvement relating to computer image generated type styles and sizes as indicated on a properly prepared layout of the job elements. The course will cover background of direct entry, VDT, and newer machine principles as they are marketed and available to the graphic arts industry.

ITCG 351. Graphic Duplication. (2-2-3); on demand.
Prerequisite: ITCG 202. A survey of the use of various methods and devices of the graphic arts currently used in the typical office or in-plant reproduction center. Experience will be gained in the preparation of direct and indirect methods of producing graphic images.

ITCG 450. Electronic Composition II. (2-2-3); II, even years.
Prerequisite: ITCG 350. A continuation of ITCG 350, concentrating on the advanced commands and intricate facets of computer image generated copy. A live job involvement to simulate an actual industrial experience in the classroom environment is the core of learning.

ITCM - Industrial Technology - Construction Management Courses

ITCM 101. Introduction to Construction Technology. (3-0-3); I.
Discussion of various aspects of the construction industry including typical building methods, cost factors, and personnel requirements. Includes residential and commercial building.

ITCM 202. Structural Analysis. (2-2-3); I.
Prerequisite: MATH 152 or higher. Review of typical structural design methods with applied calculation using free body diagrams and other static load methods.

ITCM 203. Construction Methods and Materials I. (2-2-3); I.
An investigation of various construction and building techniques, including traditional and modified methods. Laboratory will include model and prototype development.

ITCM 204. Codes, Contracts and Specifications. (3-0-3); II.
Exposure to local and state codes and architectural specifications necessary to meet contract requirements. Introduction to various code organizations and file systems.

ITCM 205. Estimating and Construction Costs. (3-0-3); II.

ITCM 304. Interpretation of Technical Drawings. (3-0-3); II.
Prerequisites: one introductory course (ITCM 101, ITEC 140, 141, or ITMT 186) and ITCD 103. A study of the application, interpretation, and visualization of technical drawings in residential and commercial industrial projects. Students will learn to use technical drawings to communicate ideas, and plan, schedule, and control industrial components, materials, and methods.

ITCM 306. Construction Project Management. (2-2-3); II.
Prerequisites: ITCM 101 and MATH 141 or higher or consent of instructor. The planning, scheduling, and control of project resources in the construction industry. Topics include work breakdown structures, precedence grids, precedence node diagrams, analytical methods for network solutions, resource scheduling, leveling and allocation, time-cost tradeoffs, and project-scheduling simulation.

ITCM 307. Hydrology. (3-0-3); on demand.
Prerequisite: GEOS 200. A study of surface and subsurface fluid flow systems. Basic areas will include open and closed channel flow, hydrogeology, sedimentation/erosion control, and applicable state/federal regulations.

ITCM 310. Principles of Surveying. (2-2-3); I.
Prerequisites: ITCM 202 and ITCD 103. A study of advanced surveying applications in the planning, design, layout, and construction of our physical environment and infrastructure.

ITCM 403. Construction Methods and Equipment II. (3-0-3); II.
Prerequisite: ITCM 203. A continuation of ITCM 203, this course is a study of the technical and management methods in construction techniques, with concentration on heavy or horizontal construction. Topics include excavation methods, equipment requirements, types, selection and scheduling, commercial high explosives, blasting pattern design, and legal/safety considerations.

ITCM 410. Construction Surveying. (2-2-3); I.
Prerequisite: ITCM 310. A study of advanced surveying applications in the planning, design, layout, and construction of our physical environment and infrastructure, with emphasis placed on the development of effective strategies to solve modern surveying problems within the construction industry.
ITEC - Electrical, Electronics, Telecommunications and Computer Technology Courses

ITEC 140. Basic Electricity.
(2-2-3); I, II.
General course on the laws, theories, and applications of electricity. Options of electricity, electronics, or manufacturing robotics should take ITEC 141. Lab required.

ITEC 141. DC Circuits.
(2-2-3); I, II.
An introduction to fundamentals of electricity and electronics, including electronics principles, components, quantities, measurements, and design and analysis of DC circuits.

ITEC 144. Network Fundamentals.
(2-2-3); II.
This course will study computer networks including the theory of network operation, selection of hardware, and topology design for such applications as Peer-to-Peer, Local Area Networks (LAN) and Wide Area Networks (WAN). The course will also survey current network protocols used for signal transport over networks, packet switching, and routing techniques.

ITEC 215. Basic Control Systems.
(2-2-3); I.
Prerequisite: ITEC 141. Control of AC and DC loads in commercial and industrial applications. Course content will include the selection and application of control devices and control relays, and the design of control circuits using electromechanical devices and programmable controllers.

ITEC 240. Residential Wiring.
(2-2-3); I, II.
Prerequisite: ITEC 141. Designing, planning, estimating, and methods of constructing electrical systems for single family dwellings. Based on most recent National Electrical Code. Lab required.

ITEC 241. AC Circuits.
(2-2-3); I, II.
Prerequisites: ITEC 141 and MATH 141 or higher, or PHYS 232. Study of AC circuits, including electromagnetism, AC principles, components, quantities, measurements, and design and analysis of AC circuits.

(2-2-3); I.
Prerequisite: ITEC 241. This course will study the technical foundations of all electronic communications systems. The students will examine the key concepts in electronic communications, including principles of modulation, the distinction between analog and digital communications, and basics of transmission path engineering.

ITEC 244. Fiber Optic Theory and Applications.
(2-2-3); II.
Prerequisite: ITEC 242. This course covers the theory of fiber optic transmission media and their application to various communications systems, from long haul, high-capacity voice/data networks, to local area networks (LAN). It will integrate hands-on laboratory experiments with lecture, readings, and problem assignments. Students will learn the principles of light transmission in optical fiber, as well as the design and configuration of communications transmission systems based on fiber optics.

ITEC 245. Digital Electronics.
(2-2-3); II.
Prerequisite: ITEC 241. Functional and logical operation of digital circuits, including logic gates, combinational logic, multivibrators, counters and registers.

ITEC 341. Solid-State Electronic Devices and Applications.
(3-0-3); II.
Prerequisites: ITEC 141 and PHYS 232. This course covers the fundamental concepts and operational principles of semiconductor devices and their applications. The course content includes semiconductor materials, carriers in semiconductors, energy bands, Fermi-Dirac distribution, p-n junctions, metal-semiconductor junction, field-effect transistors, bipolar junction transistors, high-speed transistors, solar cells, detectors and sensors as well as their applications, especially in space. The degradation and protection of semiconductor devices in space are introduced. Lab activities are embedded in the course. Equates with SSE 341.

ITEC 342. Electronic Devices and Circuits.
(2-2-3); II.
Prerequisite: ITEC 242. Solid state devices and integrated circuits along with their applications. Topics include FETs, operational amplifiers, thyristors and other specialized devices, oscillators, active filters, and voltage regulators.

ITEC 343. Motors and Generators.
(2-2-3); II.
Prerequisite: ITEC 241. Characteristics, selection, and control of AC and DC motors, solenoids, and other commercial or industrial loads. Selection and application of control devices and relays. Design of control circuits using relay logic and programmable controllers. Lab required.

ITEC 344. Wireless Communications.
(2-2-3); I.
Prerequisite: ITEC 242. The course covers fundamental concepts of wireless communications including analog and digital modulation, radio propagation, antennas, transmitter and receiver circuitry, and cellular telephony and radio.

ITEC 345. Microprocessor Electronics.
(2-2-3); I.
Prerequisite: ITEC 245 or CS 170. Components and operation of a microprocessor system, including program counters, address counters, accumulators, arithmetic logic units, instruction decoders, controller-sequencers, and registers.

ITEC 346. Programmable Logic Controllers (PLC).
(2-2-3); II.
Prerequisite: ITEC 215. This course covers the study of Programmable Logic Controllers, including the theory of PLC operation, selection of a PLC for an application, and PLC networking and programming.
ITEC 355. Digital and Microcontroller System Design. (2-2-3); I.
Prerequisite: ITEC 245. Sequential digital logic design technique. Design using Large Scale Integration (LSI) and Very High Speed Integrated Circuit Hardware Description Language (VHDL) Technology. Design techniques for solving problems using state-of-the-art VHDL and microprocessor components.

ITEC 400. Digital Signal Processing I. (2-2-3); I.
Prerequisite: ITEC 344. This course provides an introduction to the exiting world of signal processing. Upon completion the student will be familiar with the fundamentals of DSP methods and applications using the interactive MATLAB signal processing toolbox. Designed for students who have some basic familiarity with electric signal analysis.

ITEC 450. Digital Signal Processing II. (2-2-3); II.
Prerequisite: ITEC 400. This course provides an introduction to advanced topics in digital signal processing—linear estimation and production analysis, signal modeling, lattice filters, special estimation and adaptive filters; signal processing algorithms and techniques used in a broad range of applications.

ITEC 443. Industrial Electricity. (2-2-3); II.
Prerequisites: ITEC 240 and 241. Design, theory, and wiring techniques for commercial and industrial applications. Multi-family dwellings, commercial buildings, and hazardous locations are some of the topics covered. Based on the most recent National Electrical Code. Lab required.

ITEC 444. Satellite Communications. (2-2-3); II.
Prerequisites: ITEC 444. The course covers fundamental concepts of satellite communications including satellite link modulation schemes, error-correction techniques, and spacecraft and ground station hardware and instrumentation.

ITEC 445. Computer Electronics. (2-2-3); II.
Prerequisite: ITEC 345. Computer architecture, addressing modes, instruction sequence, memories, I/O systems, A/D systems, assemblers, interpreters, operating systems and microprocessor interfacing.

ITEC 480. Digital Communication and Networking. (2-2-3); I.
Prerequisite: ITEC 445. An intensive study of digital electronic communication and networking. The topics include digital modulation, transmission media characteristics, interface standards, network configurations, and testing equipment.

ITL - Italian Courses

ITL 190. Conversational Italian. (3-0-3); on demand.
An introduction to the Italian language and culture. Emphasis on correct pronunciation, rapid speech, and fluency.

ITL 200. Conversational Italian II. (3-0-3); on demand.
Emphasis on individual acquisition of correct, idiomatic Italian for communication.

ITMT - Industrial Technology - Manufacturing Courses

ITMT 106. Thermoplastic Processing. (2-2-3); I.
Introduction to the materials and techniques employed in the processing of thermoplastics.

ITMT 107. Thermosetting Plastics and Composites. (2-2-3); on demand.
Study of the various ways thermosetting plastic compounds are processed.

ITMT 170. Fundamentals of Robotics. (3-0-3); I, II.
An introduction to the operations and applications of robots. Android and industrial robots; emphasis on the history, development, sociological implications, and future trends. A survey class appropriate for any college major.

ITMT 186. Manufacturing and Fabrication. (2-2-3); I, II.
Ferrous and nonferrous metals, basic metallurgy and heat treating, sheet metal, basic welding, casting, forging, manufacturing processes and concepts.

ITMT 270. Robotics Systems Applications. (2-2-3); I.
Systems engineering for variable sequence, playback, numerical control, and intelligent industrial robots. Economic justification, application, safety, maintenance, and programming. Laboratory activities will include problem solving assignments with robots.

ITMT 286. Machine Tool Processes. (2-2-3); II.
Prerequisites: ITMT 186 and MATH 152 or higher. Various metal forming and machining experiences; emphasis on exact tolerances and precise dimensions. Lathe, mill, and grinder experiences.

ITMT 306. Mold Design and Construction. (2-2-3); II.
Prerequisite: one of the following: ITMT 106 and 386 or consent of instructor. Design of products in relationship to the physical characteristics of plastics, molding techniques, and mold construction methods.

ITMT 307. Automated Joining Technology. (2-2-3); on demand.
Prerequisite: IET 387 or ITMT 270. Metal inert gas welding techniques adapted to robots and other automated welding systems. Suitable for both welding technology students and other students involved with the robotics engineering technology option.

ITMT 370. Robotics Interfacing Engineering. (2-2-3); II.
Prerequisite: ITMT 270 or consent of instructor. Electronic, digi-
tal, and mechanical interfacing of robots in industrial manufacturing cells. Topics will include open and closed loop feedback control systems, various sensing devices, tactile sensing, vision systems, and voice synthesis.

**ITMT 386. NC-CNC Manufacturing Technology.**
*(2-2-3); I.*  
**Prerequisites:** ITMT 186 and MATH 152 or higher. Advanced tooling theory and numerical controlled and computer numerical controlled machine processes. Application and selection of carbide tooling emphasized in production applications.

**ITMT 470. Robotics Applications Engineering.**
*(2-2-3); on demand.*  
**Prerequisites:** ITMT 370 and ITMT 386. Engineering design of a specific manufacturing problem and implementation in the laboratory. Emphasis on industrial engineering techniques, end-of-arm tooling, part orientation, and control devices for unmanned machine cells. An interdisciplinary approach will be used.

**ITMT 486. Patternmaking and Foundry.**
*(2-2-3); on demand.*  
**Prerequisite:** ITMT 386. Casting of hot metals with activities in pattern development, sand testing, and mold design.

**ITMT 484. Manufacturing Information Systems.**
*(2-2-3); I.*  
**Prerequisite:** ITMT 488. Advanced tool and machining theory, with emphasis on production machining, and progressive tooling for computerized numerical control applications.

**ITMT 488. Flexible Manufacturing Engineering Technology.**
*(2-2-3); II.*  
**Prerequisite:** ITMT 386. Advanced tools and machining theory; use of carbides, with emphasis on production machining. Turret and progressive tooling design.

**LAT - Latin Courses**

**LAT 101. Beginning Latin I.**  
*(3-0-3); on demand.*  
Drill in the basic elements of Latin grammar, word study, and reading of simple Latin selections.

**LAT 102. Beginning Latin II.**  
*(3-0-3); on demand.*  
A continuation of LAT 101.

**LAT 201. Intermediate Latin I.**  
*(3-0-3); on demand.*  
Selections from Catullus, Cicero, Horace, Pliny, Martial, Livy, and Ovid.

**LAT 202. Intermediate Latin II.**  
*(3-0-3); on demand.*  
Writings of Cicero; his life and influence.

**LAT 301. Advanced Latin I.**  
*(3-0-3); on demand.*  
Poets of the Augustan Age, together with the history of the period.

**LAT 302. Advanced Latin II.**  
*(3-0-3); on demand.*  
Further study of the poetry of the Augustan Age. Selections from Vergil’s Aeneid.

**LEAD - Leadership Courses**

**LEAD 101. Leadership I.**  
*(1-0-1); I.*  
This course focuses on the characteristics of leaders, types of power, habits of successful leaders, and self-assessment involved in a study of leadership. There is an emphasis on civic engagement and leadership within a community.

**LEAD 102. Service to Society I.**  
*(1-0-1); II.*  
**Prerequisite:** LEAD 101. Exploration of leadership as a service to society through critical reflection on community service to populations in need. Integration of service experiences, course readings on justice, charity, and contemporary society, and self-reflection on the obligations of service.

**LEAD 201. Leadership II.**  
*(1-0-1); I.*  
**Prerequisites:** LEAD 101 and 102. This course focuses on the analysis of historical concepts and contemporary theories of leadership. Emphasis on application of theoretical concepts to actual leadership situations.

**LEAD 202. Service to Society II.**  
*(1-0-1); II.*  
**Prerequisite:** LEAD 201. Apply leadership principles and critically think about leaders as servants to society through active participation in a civic engagement project. Integration of service experiences and course readings on principles related to developing the inner leader are accompanied by self-reflection on the obligations of service.

**LEAD 301. Leading Groups.**  
*(1-0-1); I.*  
**Prerequisite:** LEAD 202. Group theory, concepts, research, and principles of application. Understanding how groups function. Development of skills necessary to lead and work effectively in groups through group exercises, civic engagement and experiential learning.

**LEAD 302. Leadership in Organizations.**  
*(1-0-1); II.*  
**Prerequisite:** LEAD 301. Focus on leadership theory and research within and across formal organization settings such as public/private, and profit/nonprofit. Continue with group dynamics and explore the ethical use of power.

**LEAD 401. Advanced Leadership I.**  
*(1-0-1); I.*  
Focus on an intensive and integrative study of one or more leadership issues and an applied service learning experience in a leadership role.

**LEAD 402. Advanced Leadership II.**  
*(1-0-1); II.*  
Focus on an intensive and integrative study of leadership in socie-
ty, leadership self-assessment and an applied service learning experience in a leadership role.

**LSIM - Library Science and Instructional Media Courses**

**LSIM 101. Introduction to Library Research.**
(2-0-1); I, II, second nine weeks. Introduction to the resources and services of Camden-Carroll Library including the online catalog, electronic databases, periodical literature, specialized reference sources, and the Internet. Emphasis on skills and tools needed for research projects. Designed for college freshmen. Taught on a pass/fail basis (K-Credit).

**LSIM 201. Living in an Information Society.**
(3-0-3); II. A practical introduction to how information is created, organized, retrieved, and evaluated in both electronic and print environments. Uses a concept-based approach and hands-on exercises to teach information retrieval, critical thinking, and lifelong learning skills needed to live in a rapidly changing and technologically sophisticated society.

**MATH - Mathematics Courses**

**MATH 090. Pre-Algebra.**
(3-0-3); I, II, III. Prerequisite: for students whose program of study does not require MATH 152 and have ACT subtest scores in Math of 18 or below. Exponents, integers, fractions, decimals, square roots, percent with applications, introduction to algebra and basic geometry. This is a course in the developmental studies curriculum and does not count as credit toward graduation. A student should not expect other institutions to accept this course for transfer credit.

**MATH 091. Beginning Algebra.**
(3-0-3); I, II, III. Prerequisite: for students who desire to take MATH 093 and have ACT subtest scores in Math of 18 or below. A first course in algebra for students with no previous experience with algebra or who have been unsuccessful in attempting a course in Algebra I at the secondary school level. This is a course in the developmental studies curriculum and does not count as credit toward graduation. A student should not expect other institutions to accept this course for transfer credit.

**MATH 093. Intermediate Algebra.**
(3-0-3); I, II, III. Prerequisite: for students whose program of study requires MATH 152, “C” or better in MATH 091 or minimum ACT math subscore of 19. A second course in algebra, giving the student an opportunity to gain additional competency in algebra necessary for certain courses at the University. This is a course in the developmental studies curriculum and does not count as credit toward graduation. A student should not expect other institutions to accept this course for transfer credit.

**MATH 110. Problem Solving Techniques.**
(1-0-1); on demand. A basic course emphasizing problem solving using graphing calculators.

**MATH 123. Introduction to Statistics.**
(3-0-3); I, II, III. Prerequisite: “C” or better in MATH 091 or minimum ACT math subscore of 19. Basic concepts of probability, sampling, and the algebra of events. Properties of selected discrete and continuous distributions.

**MATH 131. Mathematical Reasoning and Problem Solving.**
(3-0-3); I, II, III. Prerequisite: “C” or better in MATH 090, MATH 091, or MATH 093 or minimum ACT Math subscore of 19. A course providing the student with experiences designed to improve the ability to make decisions and solve a variety of problems. Emphasis is on learning to investigate, organize, observe, question, discuss, reason, generalize and validate. Mathematical content includes topics which are related to consumer mathematics, geometry, graphs, probability and statistics. This course satisfies the required core-math reasoning for general education.

**MATH 135. Mathematics for Technical Students.**
(3-0-3); I, II, III. Prerequisite: “C” or better in MATH 090, MATH 091, or MATH 093 or minimum ACT math subscore of 19. Mathematics applied to technical programs. Modeling real world problems involving algebra, geometry, and trigonometry; and quadratic, polynomial, exponential, logarithmic, and trigonometric functions with applications to a variety of technical fields. This course satisfies the core mathematics requirement for general education.

**MATH 141. Plane Trigonometry.**
(3-0-3); I, II, III. Prerequisite: “C” or better in MATH 090 or minimum ACT math subscore of 20. Trigonometric functions, trigonometric identities, inverse functions, and applications.

**MATH 152. College Algebra.**
(3-0-3); I, II, III. Prerequisite: “C” or better in MATH 090 or minimum ACT math subscore of 20. Field and order axioms; equations, inequalities; relations and functions; exponentials; roots; logarithms; sequences. This course satisfies the required core-math reasoning for general education.

**MATH 160. Mathematics for Business and Economics.**
(4-0-4); on demand. Prerequisite: “C” or better in MATH 093 or minimum ACT math subscore of 20. An introduction to finite mathematics and calculus. Systems of linear equations and inequalities, matrix algebra, linear programming, differentiation and integration; applications to business and economics.

**MATH 170. Introduction to Computer Science.**
(3-2-4); I, II. Prerequisite: MATH 152 or minimum ACT math subscore of 22. An overview of modern computer science; mathematical treatment of algorithms; implementation of fundamental programming principles in a modern programming language; techniques of problem solving related to computing. Designed for students who have basic familiarity with Microsoft Office applications.
Equates with CS 170.

**MATH 174. Pre-Calculus Mathematics.**
(3-0-3); I, II.
Prerequisite: "C" or better in MATH 141 or minimum ACT math subscore of 22. Exponential, logarithmic, and trigonometric functions; complex numbers; theory of equations. This course satisfies the required core-math reasoning for general education.

**MATH 175. Calculus I.**
(4-0-4); I, II.
Prerequisites: "C" or better in MATH 174, minimum ACT math subscore of 25, or MATH 141 and 152. Functions and graphs; limits; continuity; differentiation; applications of the derivative; integration; applications of the definite integral. This course satisfies the required core-math reasoning for general education.

**MATH 231. Mathematics for the Elementary Teacher I.**
(2-2-3); I, II.
Prerequisite: completion of a general education required core course in mathematics. Number systems, primes, and divisibility; fractions; decimals; real numbers; algebraic sentences. Successful completion of a basic skills exam in mathematics is required for credit in this course. Designed for preservice teachers P-9.

**MATH 232. Mathematics for the Elementary Teacher II.**
(2-2-3); I, II, III.
Prerequisite: MATH 231. Introduction to probability and statistics; geometric shapes; geometry of measurement; congruence and similarity. Designed for preservice teachers P-9.

**MATH 252. Boolean Algebra.**
(3-0-3); on demand.
Prerequisite: MATH 152 or consent of instructor. Study of the basic laws and operations of Boolean algebra; simplification techniques, circuit design.

**MATH 260. FORTRAN Programming.**
(3-0-3); I.
Prerequisite: MATH 170 or consent of instructor. Introduction to FORTRAN programming language. Application of mathematical techniques to problems in programming. Business, engineering, management, and modeling examples are employed to provide comprehensive knowledge of the language.

**MATH 275. Calculus II.**
(4-0-4); I, II.
Prerequisite: MATH 175. Differentiation and integration of exponential, logarithmic, and trigonometric functions; techniques of integration; numerical methods; improper integrals, infinite series; polar coordinates.

**MATH 276. Calculus III.**
(4-0-4); I, II.
Prerequisite: MATH 275. Polar coordinates; parametric equations; vectors; differential calculus of functions of several variables; multiple integration; vector calculus.

**MATH 300. Introduction to Mathematical Proof.**
(3-0-3); I, II, III.
Prerequisites: MATH 141 and MATH 152, or MATH 174, or MATH 175, or MATH 275. Propositional calculus; sets; relations; functions; Boolean algebras; cardinality, mathematical proofs.

**MATH 301. Elementary Linear Algebra.**
(3-0-3); II.
Prerequisite: MATH 175 or consent of instructor. Vector spaces; determinants; matrices; linear transformations; eigenvectors.

**MATH 303. Data Structures.**
(3-0-3); I, II.
Prerequisite: CIS 205. Key concepts of data definitions, such as lists, stacks, and queues. Recursion, graphs and trees, sorting and searching. Structured program design, elementary data structures and the study of algorithms as a tool of program design. Equates with CIS 303 and CS 303.

**MATH 308. Discrete Mathematics.**
(3-0-3); I.
Prerequisites: MATH 170, 275, and either CS 303 or MATH 300. An introduction to the concepts of sets and functions, mathematical logic, and proof; elementary counting principles; recurrence relations and recurrence models; algorithmic efficiency; the fundamentals of graph theory.

**MATH 312. Numerical Methods.**
(3-0-3); I.
Prerequisite: MATH 275. A basic course in numerical analysis, including error analysis, series approximation, numerical integration techniques, practical applications of matrices, solution of simultaneous nonlinear equations, and curve fitting.

**MATH 320. Codes and Cryptography.**
(3-0-3); on demand.
Prerequisite: MATH 301 or instructor permission. This course is designed as a general introduction to information theory, coding theory, and cryptography. Topics include entropy, channel capacity, Shannon’s Theorems, error-detecting and error correcting codes, maximum likelihood decoding, perfect codes, symmetric and public-key encryption, provable security, and cryptographic protocols. Specific applications of the material will be emphasized throughout the course.

**MATH 330. Geometry for Teachers (P-9).**
(2-2-3); I, II.
Prerequisite: MATH 232. Experimental and axiomatic geometry; points, lines, and planes; separations, curves and surfaces; congruence; measures; parallelism and similarity; coordinate geometry; transformations in a plane.

**MATH 332. Introduction to Finite Mathematics.**
(3-0-3); II.
Prerequisite: MATH 152. Linear programming, combinatorial analysis, probability, matrices, game theory, and graph theory. Designed for preservice teachers P-9.

**MATH 350. Introduction to Higher Algebra.**
(3-0-3); II.
Prerequisite: MATH 300. Groups, rings, integral domains and related topics.
*MATH 353. Statistics.
(3-0-3); I, II, III.
Prerequisites: MATH 123 or MATH 131, or MATH 135, or MATH 141, or MATH 152, or MATH 174, or MATH 175. This course satisfies the area studies - natural and mathematical sciences for general education. The purpose of this course is to present key concepts from a non-calculus point of view in descriptive statistics, probability, discrete and continuous distributions, regression and correlation analysis and modeling, sampling distributions, confidence intervals and hypothesis tests for one and two population parameters, and one-way analysis of variance. Applications will be in a wide variety of fields. Technology integration will be restricted to the ones used in the scientific community. *A student may receive credit toward graduation in only one of the following: MATH 353 or 354.

(3-0-3); I, II, III.
Prerequisite: completion of a general education math reasoning core course. Introduction to statistics with applications to business. *A student may receive credit toward graduation in only one of the following: MATH 353 or 354.

(3-0-3); I.
Prerequisites: MATH 170 and 175. Linear, integer and dynamic programming, game theory, and scheduling.

MATH 363. Differential Equations.
(3-0-3); II.
Prerequisite: MATH 275. Special types of first order differential equations; linear differential equations; operator methods; Laplace transforms; series methods; applications.

MATH 365. Introduction to Mathematical Statistics.
(3-0-3); I.
Prerequisite: MATH 275. A calculus-based introduction to probability and statistics.

MATH 370. College Geometry I.
(3-0-3); I.
Prerequisite: MATH 300. Sets of axioms, finite geometries, convexity, Euclidean geometry of the polygon and circle, geometric constructions.

MATH 371. College Geometry II.
(3-0-3); II.
Prerequisite: MATH 370. Geometric transformations, non-Euclidean geometry, projective geometry, geometric topology, geometry of inversion.

MATH 389. Honors Seminar.
(3-0-3); on demand.
Prerequisites: membership in the Honors Program, and completion of the general education mathematics requirement which includes one of the following: MATH 123 Introduction to Statistics, MATH 131 Mathematical Reasoning and Problem Solving, MATH 135 Mathematics for Technical Students, MATH 141 Plane Trigonometry, MATH 152 College Algebra, MATH 174 Precalculus, or MATH 175 Calculus I. The course is designed for the liberal arts major. Topics may include the problem solving strategies derived from studying games, number contemplation and computation, encryption systems, the mathematical concept of infinity, applications in geometry, contortions of space, chaos and fractals, statistical thinking, probability, and various modes of mathematical decision making.

MATH 391. Dynamics.
(3-0-3); I.
Prerequisite: PHYS 221 or 231. A study of motion of bodies. Kinematics and dynamics of particles and rigid bodies; work and energy; impulse and momentum. Equates with PHYS 391.

MATH 400. Foundations of Computability.
(3-0-3); on demand.
Prerequisites: completion of a general education math reasoning core course and CS 310, MATH 300 or PHIL 306. This course is an introduction to fundamental questions of computer science, mathematics, and philosophy of mathematics. In particular, it is an analysis of the capabilities and limitations of computability, logic, and mathematical proof. Topics include finite automata and regular languages, pushdown automata and context-free languages, the Church-Turing thesis, decidability and the Halting Problem, Gödel’s Incompleteness Theorems, the Axiom of Choice and some variants, and an introduction to complexity classes and NP-completeness.

(2-2-3); I.
Prerequisites: admission to TEP and completion of at least 17 hours in mathematics. Corequisite: MATH 403. Methods course for students who desire to become teachers of middle school science and secondary school biology, physical science, or mathematics. The course provides integrated and content specific clinical experiences designed to prepare students for student teaching their subsequent roles as classroom teachers. Equates with BIOL 402.

MATH 403. Integrated Biology, Mathematics and Science Field Experiences in Teaching.
(1-4-3); I.
Prerequisites: admission to TEP and completion of at least 17 hours in mathematics. Corequisite: MATH 402. Course provides structured field experiences for students who desire to become teachers of secondary school biology, mathematics, or physical science. This course provides guided field experiences to acclimate the student into the culture of teaching. Equates with BIOL 403 and SCI 403.

MATH 404. Topology.
(3-0-3); on demand.
Prerequisites: MATH 300 and 350. Elementary set theory; topological spaces; metric spaces; compactness and connectedness; mappings of topological spaces and related topics.

MATH 410. Introduction to Real Analysis.
(3-0-3); II.
Prerequisites: MATH 276 and 300. Algebraic and topological properties of the reals; limits and continuity; differentiation; infinite series; Riemann integration.

MATH 411 Functional Analysis.
(3-0-3); on demand.
Prerequisites: MATH 301 and 412. Linear spaces; normed and branched spaces; Hilbert spaces; applications to sequence spaces; and Fourier series.

MATH 412. Real Variables.  
(3-0-3); on demand. 
Prerequisite: MATH 410. Topological properties of Euclidean space; theory of differentiation and integration; sequences and series of functions.

MATH 418. Probability.  
(3-0-3); I. 
Prerequisites: MATH 275 and 365. A course in mathematical probability and its applications to statistical analysis.

MATH 420. Mathematical Statistics.  
(3-0-3); II. 
Prerequisite: MATH 418. Hypothesis testing and estimation; bivariate and multivariate distributions; order statistics; test of fit; nonparametric comparison of locations; distribution theory.

MATH 440 Biostatistical Methods.  
(3-1-4); on demand. 
Prerequisite: MATH 353. The purpose of this course is to extend students' knowledge in statistical concepts as applied to the health sciences, medicine, and biology. Topics include confidence intervals and hypothesis testing; sample size and power considerations; analysis of variance and multiple comparisons; correlation and regression; multiple regression and statistical control of confounding; logistic regression; survival analysis; and fundamentals of clinical trials.

MATH 442. Mathematical Models in Biology for Teachers.  
(3-0-3); I. 
Prerequisite: MATH 300. Discrete models across a variety of biological subdisciplines. Topics include linear and nonlinear models of population; Markov models of molecular evolution; phylogenetic tree construction; and infectious disease models.

(3-0-3); I. 
Prerequisite: MATH 353, 354 or 365. Single factor experiments; factorial experiments; qualitative and quantitative factors; fixed, random and mixed models; nested experiments.

MATH 455. Linear Statistical Models.  
(3-0-3); II. 
Prerequisites: MATH 353, 354 or 365 or equivalent. Linear and quadratic regression models; least squares estimates; statistical inference; multicollinearity; residual analysis; selection of regression models; lack of fit.

(3-0-3); II. 
Prerequisite: MATH 353, 354, or 365. A course in basic nonparametric methods with applications.

MATH 463. Partial Differential Equations.  
(3-0-3); I, in odd years or on demand. 
Prerequisite: MATH 363. An introductory course in partial differential equations. Topics include partial differential equations of first and second order and applications.

MATH 473. Projective Geometry.  
(3-0-3); on demand. 
Prerequisite: MATH 370. A synthetic treatment of projective geometry; conics; axiomatic projective geometry; and some descendants of real projective geometry.

MATH 481. Mathematics for Engineers and Scientists.  
(3-0-3); I. 
Prerequisites: MATH 276 and 363. Fourier series, ordinary and partial differential equations, special functions, and integral transforms. Equates with PHYS 481.

MATH 485. Vector Analysis.  
(3-0-3); on demand. 
Prerequisite: MATH 276. Vector algebra; vector functions of a single variable; scalar and vector fields; line integrals; generalizations and applications.

MATH 486. Complex Variables.  
(3-0-3); on demand. 
Prerequisite: MATH 276. Algebra of complex variables; analytic functions, integrals; power series; residues and poles; conformal mappings.

MATH 495. Topics in the Mathematics Curriculum.  
(1 to 6 hrs.); on demand. 
Prerequisite: consent of instructor. New curricula developments in mathematics.

MKT - Marketing Courses

MKT 200. The ABC's of Marketing.  
(3-0-3); I, II. 
This course explores the role of marketing in society, with an emphasis on class discussion. The ABC's are three segments of content: A history of the evolution of marketing's role in society, Best
marketing practices to promote business success, and Changing marketplace: contemporary marketing topics. Specific topics discussed will include green marketing, social media and technology, ethics and social responsibility, stealth and guerrilla marketing, branding, customer satisfaction and loyalty, value creation, advertising and regulations, cause and social marketing. This course satisfies the SBS I requirement for general education.

MKT 304. Marketing. (3-0-3); I, II, III.
The basic principles of marketing and the impact of globalization, diversity, ethics, and small business marketing. An understanding of how the elements of the marketing mix (product, price, place, and promotion) are used to create superior value for customers and achieve organizational objectives.

MKT 325. Marketing Ethics & Social Responsibility. (3-0-3); on demand.
Prerequisites: MKT 304 and MNGT 301 or consent of the instructor. This course will examine ethical theories and reasoning as a foundation for managerial decision-making, each addressed from the marketing perspective. Discussion will focus on how moral standards are applied to marketing decisions, behaviors and institutions. Topics will evaluate direction and meaning to problems in marketing ethics through reflection on concepts such as individual choice, freedom and responsibility, desire satisfaction, noncoercive exchanges, and instrumental efficiency.

MKT 339. Cooperative Education III. (1 to 8 hrs.); on demand.
Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (MKT 339/439) available for option credit.

MKT 340. E-Marketing and Social Networking. (3-0-3); on demand.
Prerequisite: MKT 304 or consent of instructor. This course examines emerging technological applications and their impact on and implications for marketing strategy in the online environment including, but not limited to, the growing number of social networks as consumer communication vehicles.

MKT 345. Marketing Strategies for Small Business. (3-0-3); on demand.
Prerequisite: MKT 304. Examines the marketing methods used by small to medium-sized companies operating with limited budgets. The class will explore the formulation of a marketing plan. In addition, pricing, distribution, and promotion issues for the small business will be investigated.

MKT 350. Professional Selling. (3-0-3); I.
Prerequisite: MKT 304. The major promotional method used in American business, personal selling, involves person-to-person communication between a buyer and seller. The stages of the selling process, such as prospecting, the presentation, and the close will be explored.

MKT 354. Consumer Behavior. (3-0-3), on demand.
Prerequisite: MKT 304 or consent of instructor. Examines the processes consumers use to pick, secure, use and dispose of products and services. In addition, internal forces such as personality, and external forces such as culture, which impact the decision making process, are reviewed.

MKT 365. Services and Relationship Marketing. (3-0-3); on demand.
Prerequisite: MKT 304 or consent of instructor. This course examines the marketing of services from a managerial perspective. Includes topics such as the unique and tangible nature of services; managing the service encounter; pricing, promoting, and distribution of services. Developing skills and techniques for excellent service quality and customer relationship management (CRM) have become increasingly important to the retention of customers and key to the success of service industries.

MKT 375. Sustainable Marketing. (3-0-3); on demand.
Prerequisite: MKT 304 or consent of instructor. This course addresses ecological issues facing society and modern marketing professionals. Course discussion will include green marketing, environmental responsibility, consumer attitudes and consumption, and providing value to customers via sustainable marketing strategies.

MKT 380. Corporate Marketing Strategies. (3-0-3); on demand.
Prerequisite: MKT 304 or consent of instructor. This course examines the world of corporate marketing and emphasizes the importance of businesses interacting effectively with their stakeholders. Timely, and ongoing information exchange, as well as building cooperative relationships between other businesses, the media, investors and government form the basis of this course. Additionally, this course examines the important area of crisis management.

MKT 399. Selected Workshop Topics. (1 to 4 hrs.); on demand.
Workshops on various marketing subjects will be presented periodically to supplement the basic course offerings in marketing. Credit toward degree programs must be approved by the student’s advisor.

MKT 439. Cooperative Education IV. (1 to 8 hrs.); on demand.
Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a senior level status. Maximum of three hours of cooperative education credit (MKT 339/439) available for option credit.

MKT 451. Retail Marketing. (3-0-3); on demand.
Prerequisite: MKT 304. The role of retailing institutions to meet the fast-paced changes in society which confront final consumers in their purchases for personal, family, or household nonbusiness uses. The retailing process is critically analyzed along with the environment within which it operates, and the institutions and functions that are performed.

MKT 452. Marketing Research and Analysis. (3-0-3); I.
Prerequisites: MATH 354 and MKT 304. Marketing research is used
by a wide variety of organizations to collect information that will assist them in making better decisions. The process of designing, gathering, analyzing, and reporting data relevant to a specific decision will be explored.

**MKT 454. Integrated Marketing Communication.**  
(3-0-3); II.  
Prerequisite: MKT 304. Required for marketing option in Business Administration. Promotional strategies are dedicated to demonstrating how organizations may communicate, compete and convince their target markets through the interrelationship of advertising, sales promotion, publicity and public relations.

**MKT 455. Advertising.**  
(3-0-3); on demand.  
Prerequisite: MKT 304. A discussion of the milestones in the evolution of advertising and a description of advertising’s role in the marketing communication process. The course will investigate both the client and professional advertiser perspective. Theory and application are stressed.

**MKT 469. International Marketing.**  
(3-0-3); II.  
Prerequisite: MKT 304. The role of the United States in the competitive arena of world trade. Preparing students to operate and compete globally; how to find new markets to replace saturated markets, how to determine which products international customers want, how to customize products for these demands, how to best reach these customers, what pricing strategies are most appropriate, what distribution channels are adequate, and how to overcome barriers that hinder implementation of marketing programs. Equates with IST 469.

**MKT 476. Special Problems in Marketing.**  
(1 to 3 hrs.); I, II, III.  
Prerequisites: senior standing and consent of department chair. Self-directed independent study on a specific problem, based on written proposal and justification submitted by student prior to registration. Each request will be considered on its own merit in relation to the special needs, interest, and abilities of the student.

**MKT 495. Marketing Strategies.**  
(3-0-3); II.  
Prerequisites: MKT 304, MNGT 301, and completion of or concurrent enrollment in all required marketing option courses, or consent of instructor. An integrated course in marketing, systemically oriented with emphasis on the marketing mix, the formulation of competitive strategies, and special attention to market analysis, marketing information, and sales forecasting.

**MKT 499. Selected Workshop Topics.**  
(1 to 4 hrs.); on demand.  
Workshops on various marketing subjects will be presented periodically to supplement the basic course offerings in marketing. Credit toward degree programs must be approved by the student’s advisor.

**MNGT - Management Courses**

**MNGT 101. Reel Business.**  
(3-0-3); I, II.

Using depictions from various films, this course explores how popular culture has portrayed a variety of business issues including management, employees, ethics, gender and diversity in the workplace, the social responsibility of business, career development and the dynamics of organizational life. Particular emphasis is given to how and why society’s images of business have evolved throughout history. *This interdisciplinary course satisfies the SBS I requirement for general education.*

**MNGT 160. Business and Society.**  
(3-0-3); I, II.  
A basic introductory course designed to expose students to a variety of issues regarding management, marketing, finance, accounting, economics, technology, and business law. Through this course, students will develop an understanding and an appreciation of the interaction between the world of business and society.

**MNGT 199. Selected Workshop Topics.**  
(1 to 4 hrs.); on demand.  
Workshops on various management subjects will be presented periodically to supplement the basic course offerings in management. Credit toward degree programs must be approved by the student’s advisor.

**MNGT 261. The Legal Environment of Business Organizations.**  
(3-0-3); I, II, III.  
The forms of business organizations, including sole proprietorships, partnerships, and profit and nonprofit corporations. The regulatory environment and legal constraints on organizations; the relationship between business and government in policy formation; and basic legal concepts.

**MNGT 300. Quantitative Methods in Business and Economics.**  
(3-0-3); I, II, III.  
Prerequisite: ECON 202, MATH 152, 354, or equivalent. Application of mathematical and statistical techniques to business, the market systems, and the study of economic and finance. Equates with ECON 300.

**MNGT 301. Principles of Management.**  
(3-0-3); I, II, III.  
History of management, the management process, the principles of management and application in the operations of business. The fundamental concepts of management applied to such areas of business activity as organization, personnel, production, and research.

**MNGT 306. Production and Quality Management.**  
(3-0-3); II.  
Prerequisites: MATH 152 and 354, MNGT 301. How Total Quality Management affects operations in manufacturing and service firms. Qualitative and quantitative means for evaluating alternatives for improving customer satisfaction by improving quality, speed and flexibility or by reducing waste are described and illustrated. Statistical quality control, lean production, just-in-time inventory and production procedures, facilities location, and equipment layout are concepts usually addressed using spreadsheet software, a real world approach that facilitates student understanding and problem solving.
MNGT 310. Small Business Organization.
(3-0-3); II.
Aspects of management that are unique to small firms; economic and social environment in which small firms function; student practice in making decisions on problems facing managers of small businesses.

(3-0-3); I.
Prerequisite: MNGT 301. Personnel management principles, job requirements; selection techniques; testing programs; facilitation of employee adjustment; wage and salary administration; legal aspects of labor relations; financial incentives.

MNGT 339. Cooperative Education III.
(1 to 8 hrs.); on demand.
Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (MNGT 339/439) available for option credit.

MNGT 362. The Legal Environment and Business Practices.
(3-0-3); on demand.
Prerequisite: MNGT 261. Business practices, emphasizing legal problem avoidance. Areas of the law which impact business success or failure; the Uniform Commercial Code, state and federal regulations, and laws.

(3-0-3); on demand.
Prerequisites: ACCT 281, 282, and FIN 360. Examines the financial issues small businesses deal with at start-up, and on a day-to-day basis. Students will learn how small businesses can apply financial principles to benefit the company. Equates with FIN 365.

MNGT 399. Selected Workshop Topics.
(1 to 4 hrs.); on demand.
Workshops on various management subjects will be presented periodically to supplement the basic course offerings in management. Credit toward degree programs must be approved by the student's advisor.

MNGT 401. Health Care Law and Policy.
(3-0-3); on demand.
Prerequisite: MNGT 301 or permission of the instructor. This is a survey of the law and policy of health care, covering the history of health care law and policy, the fundamental principles of law as applied to health care, and the federal and state legislation and regulations related to health care.

MNGT 409. International Management.
(3-0-3); on demand.
Prerequisite: MNGT 301. A global view of management within various cultures and countries. The course covers international competition, cross-national ethics, international strategy, cross-cultural management, international human resources, and international leadership. Equates with IST 409.

MNGT 411. Labor Relations.
(3-0-3); on demand.
Prerequisite: MNGT 311. Historical development of the U.S. labor movement and a comparative analysis with other Western culture labor movements. Emphasis on developing insights into labor's point of view. An introduction to labor-management negotiations and grievance procedures.

(3-0-3); on demand.
Prerequisites: MKT 304 and MNGT 301. The application of principles of management and marketing to the specific needs of public and nonprofit organizations. Formulation, implementation, and evaluation strategies for management and marketing of these organizations are explored.

MNGT 420. New Venture Creation.
(3-0-3); on demand.
Prerequisites: FIN/MNGT 365 and MKT 345. Examines the issues small businesses deal with at start-up and on a day-to-day basis. Students will learn the steps necessary to start a small business.

(3-0-3); on demand.
Prerequisites: BIS 321 or 421, MNGT 301. Study of the relevant theories, issues, trends, and methods in training and developing adult learners in work organizations; includes program design, needs and task analysis, delivery methods, working with consultants, and program evaluations. Equates with BIS 425.

(3-0-3); on demand.
Prerequisite: MNGT 306 or consent of instructor. Presents a decision-making framework that allows students to explore and weigh three critical elements of formulating solutions for unstructured problems; root cause analysis, option analysis, and risk analysis. Also presents project management concepts to deal with the implementation of decisions and plans.

MNGT 439. Cooperative Education IV.
(1 to 8 hrs.); on demand.
Work experience with an in-depth exposure representative of the student's academic level and experience analogous to a senior level course. Maximum of three hours of cooperative education credit (MNGT 339/439) available for option credit.

MNGT 450. Supply Chain Management.
(3-0-3); I.
Prerequisite: completion of the program core. This course is designed to provide a basic understanding of the role of the various entities in managing the supply chain, the inter-relatedness of critical activities, and a strategic view of the importance of supply chain management to firms. In this course, students will gain an understanding of the definition and scope of supply chain management and an appreciation of the potential for businesses to improve bottom-line performance through an integrated, strategic approach to the management of their supply chains.

MNGT 463. Law and Ethics in Business.
(3-0-3); II.
Prerequisite: MNGT 261. The social responsibility of business and individuals in commerce. Value systems, externally or self-imposed, their development and operation.
MNGT 465. Organizational Behavior. 
(3-0-3); I, II, III. 
Prerequisite: MNGT 301. A study of human and interpersonal behavior critical to understanding, evaluating, and appraising business and social situations. Emphasis on skill and the ability to work with people, groups, and institutions.

(3-0-3); I. 
Prerequisite: MNGT 465. An in-depth study of effective leadership within modern organizations focused primarily upon managerial leadership. The importance and use of teams and groups within modern organizations will also be examined. Theories, research, strategic importance, and skills in the areas of leadership and teamwork will be studied.

MNGT 476. Special Problems in Management. 
(1 to 3 hrs.); on demand. 
Prerequisites: senior standing and consent of department chair. Self-directed independent study on a specific problem, based on written proposal and justification submitted by student prior to registration. Each request will be considered on its own merit in relation to the special needs, interest, and abilities of the student.

MNGT 486. Management Internship Program. 
(3 to 12 hrs.); on demand. 
Prerequisites: junior or senior standing and 12 hours in major area, with 2.5 GPA in major area and consent of instructor. The internship program involves placement of students in positions in business comparable to those filled by professional career employees. Participants work under the supervision of high level officials possessing major departmental responsibilities. Available as option credit.

MNGT 499C. Strategic Management. 
(3-0-3); I, II, III. 
Prerequisites: ECON/MNGT 300, FIN 360, MKT 304, MNGT 301, MNGT 465, and senior standing. Approaches for the integration of business functions and the development of strategies in managing domestic and global enterprises for competitive advantage. This course satisfies the integrative component for general education and is required for the B.B.A. core.

MS - Military Science Courses

(2-0-2); I. 
Make your first new peer group at college one committed to performing well and enjoying the experience. Increase self-confidence through team study and activities in basic drill, physical fitness, rappelling, leadership reaction course, first aid, making presentations and basic marksmanship. Learn fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. Participation in a weekend exercise is optional, but highly encouraged.

MS 101A. Leadership Laboratory. 
(0-2-1); I. 
Corequisite: MS 101. Only open to (and required of) students in the associated military science course. Series with different roles for students at different levels in the program. Learn and practice basic skills, gain insight into advanced course in order to make an informed decision whether to apply for it. Build self-confidence and team building leadership skills that can be applied throughout life.

MS 102. Introduction to Leadership. 
(2-0-2); II. 
Learn/apply principles of effective leading. Reinforce self-confidence through participation in physically and mentally challenging exercises with upper division ROTC students. Develop communication skills to improve individual performance and group interaction. Relate organizational ethical values to the effectiveness of a leader. Participation in weekend exercise is optional, but highly encouraged.

MS 102A. Leadership Laboratory. 
(0-2-1); II. 
Corequisite: MS 102. Only open to (and required of) students in the associated military science course. Series with different roles for students at different levels in the program. Learn and practice basic skills. Gain insight into advanced course in order to make an informed decision whether to apply for it. Build self-confidence and team building leadership skills that can be applied throughout life.

MS 201. Self/Team Development. 
(2-0-2); I. 
Learn/apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Develop skills in oral presentations, writing concisely, planning of events, coordination of group efforts, advanced first aid, land navigation, and basic military tactics. Learn fundamentals of ROTC’s Leadership Assessment Program. Participation in a weekend exercise is optional, but highly encouraged.

MS 201A. Leadership Laboratory. 
(0-2-1); I. 
Corequisite: MS 201. Only open to (and required of) students in the associated military science course. Series with different roles for students at different levels in the program. Learn and practice basic skills. Gain insight into advanced course in order to make an informed decision whether to apply for it. Build self-confidence and team building leadership skills that can be applied throughout life.

MS 202. Individual/Team Military Tactics. 
(2-0-2); II. 
Introduction to individual and team military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security, and methods of pre-execution checks. Practical exercise with upper division ROTC students. Learn techniques for training others as an aspect of continued leadership development. Participation in a weekend exercise is optional, but highly encouraged.

MS 202A. Leadership Laboratory. 
(0-2-1); II. 
Corequisite: MS 202. Only open to (and required of) students in the associated military science course. Series with different roles for students at different levels in the program. Learn and practice basic skills. Gain insight into advanced course in order to make an
informed decision whether to apply for it. Build self-confidence and team building leadership skills that can be applied throughout life.

**MS 301. Leading Small Organizations I.**
*(2-0-2); I.*
Corequisite: MS 301A. Series of practical opportunities to lead small groups, receive personal assessment and encouragement, and lead again in situations of increasing complexity. Uses small unit tactics and opportunities to plan and conduct training for lower division students both to develop such skills and as vehicles for practicing leading. Two hours and a required leadership lab, MS 301A, plus required participation in three one-hour sessions for physical fitness. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.

**MS 301A. Advanced Leadership Laboratory.**
*(0-2-1); I.*
Corequisite: MS 301. Open only to students in the associated military science course. Series with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training and activities with basic course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions.

**MS 302. Leading Small Organizations II.**
*(2-0-2); II.*
Corequisite: MS 302A. Continues methodology of MS 301. Analyze tasks; prepare written or oral guidance for team members to accomplish task. Delegate tasks and supervise. Plan for and adapt to the unexpected in organization under stress. Examine and apply lessons from leadership case studies. Examine importance of ethical decision making in setting a positive climate that enhances team performance. Two hours and required leadership lab, MS 302A, plus required participation in three one-hour sessions for physical fitness. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.

**MS 302A. Advanced Leadership Laboratory.**
*(0-2-1); II.*
Corequisite: MS 302. Open only to students in the associated military science course. Series with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training and activities with basic course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions.

**MS 339. Cooperative Education in Military Leadership.**
*(0-0-4); III.*
Attendance at ROTC Advanced Summer Camp. (Six weeks in duration.)

**MS 401. Leadership Challenges and Goal Setting.**
*(2-0-2); I.*
Corequisite: MS 401A. Plan, conduct, and evaluate activities of the ROTC cadet organization. Articulate goals, put plans into action to attain them. Assess organizational cohesion and develop strategies to improve it. Develop confidence in skills to lead people and manage resources. Learn/apply various Army policies and programs in this effort. Two hours and a required leadership lab, MS 401A, plus required participation in three one-hour sessions for physical fitness. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.

**MS 401A. Advanced Leadership Laboratory.**
*(0-2-1); I.*
Corequisite: MS 401. Open only to students in the associated military science course. Series with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training and activities with basic course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions.

**MS 402. Transition to Lieutenant.**
*(2-0-2); II.*
Corequisite: continues the methodology from MS 401. Identify and resolve ethical dilemmas. Refine counseling and motivating techniques. Examine aspects of tradition and law as related to leading as an officer in the United States Army. Prepare for the future as a successful Army lieutenant. Two hours and a required leadership lab, plus required participation in three one-hour sessions for physical fitness. Participation in one weekend exercise is also required, and one or two more weekend exercises may be offered for optional participation.

**MS 402A. Advanced Leadership Laboratory.**
*(0-2-1); II.*
Corequisite: MS 402. Open only to students in the associated military science course. Series with different roles for students at different levels in the program. Involves leadership responsibilities for the planning, coordination, execution, and evaluation of various training and activities with basic course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions.

**MS 476. Military Science Workshop.**
*(3-0-3); I, II.*
Prerequisite: permission by the chair. Restricted to students enrolled/contracted in Army ROTC who have completed all 300 and 400 level Military Science courses. Students must have approval from the instructor prior to registration. The workshop format is an interactive learning experience designed to build and/or improve specific skills in military science. A maximum of six semester hours with different workshop topics may be earned under this course number.

**MSU - University Studies Courses**

**MSU 099. Learning for Success.**
*(1-0-1); I, II.*
This course is required for students who are readmitted by the Academic Standards and Appeals Committee. This course is de-
signed to assist students with positive learning experiences to enhance academic success.

**MSU 339. Cooperative Education.**
**(1-8 hrs); I, II, III.**
*Prerequisite: upper division standing. A total of eight hours may be applied to the degree. Competency-based practical/work experiences designed to integrate theoretical aspects of education with practical aspects of work experience in an organized and supervised fashion. Student must have consent of instructor prior to registration.*

**MSU 399. Selected Topics/Workshop.**
**(1-3 hrs); on demand.**
*Prerequisite: upper division standing. Courses/workshops on various subjects frequently utilizing innovative, experimental or hands-on techniques to supplement regular curricular offerings. Credit toward the degree must be approved by student’s advisor and department chair.*

**MSU 400. The World of Work.**
**(2-0-1); I, II.**
*Prerequisite: senior standing or consent of instructor. Development of skills in self-assessment, researching companies, locating job opportunities, writing job search documents, and conducting a personalized job campaign.*

**MSU 476. Special Problems.**
**(1-3 hrs); I, II, III.**
*Prerequisites: upper division standing and consent of advisor. Designed for the purpose of permitting a student to do advanced work/research as a continuation of an earlier experience or to work in an area of special interest. Self-directed independent study based on a written proposal and justification submitted prior to the beginning of the semester. Student must have approval from the instructor prior to registration. Each request considered separately.*

**MSU 499C. Senior Seminar.**
**(3-0-3); I, II.**
*Prerequisite: open only to seniors pursuing a Bachelor of University Studies degree. An integrative course designed to forge an interdisciplinary learning experience centered around a relevant contemporary issue and to culminate the undergraduate experience by preparing for post-college life. This course satisfies the integrative component for general education.*

**MUSC - Music (Conducting) Courses**

**MUSC 271. Basic Conducting.**
**(2-0-2); I.**
*Prerequisite: full admission to a music major or minor program as determined by audition. Fundamentals of score reading and baton technique.*

**MUSC 471. Choral Conducting.**
**(2-0-2); II.**
*Prerequisite: MUSC 271. Baton technique, rehearsal procedures, choral diction, and style and interpretation of choral works.*

**MUSC 472. Instrumental Conducting.**
**(2-0-2); II.**
*Prerequisite: MUSC 271. Baton technique, rehearsal procedures, and style and interpretation of instrumental works.*

**MUSC 473. Rehearsal Techniques for Jazz Ensembles.**
**(2-0-2); on demand.**
*Prerequisite: MUSC 271. Special techniques needed in rehearsing jazz, pop, and rock ensembles.*

**MUSE - Music (Education) Courses**

**MUSE 207. Foundations of Music Education.**
**(3-0-3); II.**
*Orientation for students considering music teaching as a career. Course will introduce the history of music education in the public schools while including the philosophic, political, and social foundations of teaching in the public schools. Field experiences are an integral part of the course. Required for admission into the Teacher Education Program (TEP).*

**MUSE 215. Microcomputers and Music.**
**(3-0-3); II.**
*Students must be able to read music in all clefs. Applications of microcomputers in music. An introduction to the current usage, implementation, and software.*

**MUSE 222. Music for the Elementary Teacher.**
**(3-0-3); I, II.**
*Rudiments of music theory and methods for teaching music to elementary school children.*

**MUSE 325. Materials and Methods for Elementary Grades.**
**(2-2-3); I.**
*Prerequisite: MUSE 207. Materials and methods for the elementary school with emphasis on the teaching of musical concepts through developmental techniques.*

**MUSE 335. Field Experience.**
**(1-3 hrs.); on demand.**
*Two full days weekly of teaching under supervision in public schools in nearby communities.*

**MUSE 336. Field Experience.**
**(1-3 hrs.); on demand.**
*Continuation of MUSE 335.***

**MUSE 375. Vocal Methods and Materials.**
**(3-0-3); II.**
*Prerequisite: MUSE 207. Instructional procedures and materials used in vocal teaching from the elementary grades through high school.*

**MUSE 376. Instrumental Materials and Methods.**
**(3-0-3); II.**
*Prerequisite: MUSE 207. Instructional procedures and materials used in instrumental teaching from the elementary grades through high school.*

**MUSE 377. Instrumental Repair and Maintenance.**
**(1-1-1); I.**
*Demonstration and practice in simple repairs and maintenance of band and orchestral instruments.*
(2-1-2); II.  
Survey and evaluation of materials and methods for teaching class and private piano.

(2-0-2); I.  
Prerequisite: MUSE 207. This course will acquaint the music education major with the structure, function, and development of the vocal mechanism. Students will learn how to protect and develop the vocal instrument in individual and group instructional settings. Topics include the physiology of the singing voice, basics of singing, acoustics, characteristics of voices at various developmental stages, vocal health, teaching singing in individual and group settings, choosing repertoire to support the development of the vocal instrument, assessing results, and nurturing musical artistry.

MUSE 458. Percussion Pedagogy.  
(2-0-2); on demand.  
A study of the development of percussion instruments, literature, and performing techniques.

MUSE 479. Marching Band Techniques.  
(2-0-2); I, III.  
Techniques of preparing marching bands for performance.

MUSE 415. Voice Pedagogy.  
(3-0-3); on demand.  
An introduction to the physiological, acoustical, and phonetic bases of singing and private voice instruction. Emphasis on the relationship between scientific fact and the practical application of principle through the use of imagery and phonetic choice.

MUSG - Music (Class Applied) Courses

MUSG 123. Class Piano I.  
(0-2-1); I, II.

MUSG 124. Class Piano II.  
(0-2-1); I, II.  
Prerequisite: MUSG 123 Class Piano I.

MUSG 126. Traditional English and American Dance.  
(0-2-1); on demand.  
Technique and style of American and English country dances on the circle, square, and contra formation.

MUSG 135. Class Guitar I.  
(0-2-1); I, II.

MUSG 136. Class Classical Guitar.  
(0-2-1); I, II.

MUSG 137. Class Banjo.  
(0-2-1); on demand.

MUSG 183. Studio Improvisation.  
(0-2-1); I, II.  
Jazz styles, improvisational theories and techniques, with emphasis on small group playing and supervised improvisation. May be repeated for credit.

MUSG 211. Class Woodwinds I.  
(0-3-1); I.  
Not for woodwinds majors.

MUSG 212. Class Woodwinds II.  
(0-3-1); II.  
Prerequisite: MUSG 211.

MUSG 213. Class Brasswinds I.  
(0-3-1); I.  
Not for brasswinds majors.

MUSG 214. Class Brasswinds II.  
(0-3-1); II.  
Prerequisite: MUSG 213. Performance techniques and teaching procedures for brasswind instruments. May be substituted for MUSG 213.

MUSG 215. Class Harp.  
(0-2-1); on demand.

MUSG 217. Class Percussion.  
(0-2-1); I, II.

MUSG 223. Class Piano III.  
(0-2-1); I, II.  
Prerequisite: MUSG 124.

MUSG 224. Class Piano IV.  
(0-2-1); I, II.  
Prerequisite: MUSG 223.

MUSG 226. Class Strings.  
(0-2-1); I, II.

MUSG 235. Class Guitar II.  
(0-2-1); I, II.

MUSG 239. Class Voice.  
(0-2-1); I, II.

MUSG 240. Diction for Singers I.  
(0-2-1); I.  
An introduction to the International Phonetic Alphabet and the study of phonetic rules and principles of pronunciation as applicable for singing in English, Italian, Latin, and Spanish.

MUSG 241. Diction for Singers II.  
(0-2-1); II.  
An introduction to the International Phonetic Alphabet and the study of phonetic rules and principles of pronunciation as applicable for singing in German and French.

MUSG 245. Jazz Keyboard I.  
(0-2-1); I.  
Prerequisite: MUSG 124 or consent of instructor. An introduction to jazz keyboard techniques with emphasis on ensemble playing.

MUSG 246. Jazz Keyboard II.  
(0-2-1); II.  
Prerequisite: MUSG 245. Continuation of MUSG 245.

MUSG 345. Jazz Keyboard III.  
(0-2-1); I.
Prerequisite: MUSG 246. Jazz keyboard techniques with emphasis on solo playing.

MUSG 346. Jazz Keyboard IV.  
(0-2-1); II.  
Prerequisite: MUSG 345. Continuation of MUSG 345.

MUSG 379. Double Reed Making.  
(0-2-1); on demand.  
Concepts and skills of making double reeds, oboe through contrabassoon. May be repeated for credit.

MUSG 383. Studio Improvisation.  
(0-2-1); I, II.  
Prerequisite: four hours of credit in MUSG 183. May be repeated for credit.

MUSG 383. Studio Improvisation.  
(0-2-1); I, II.  
Prerequisite: four hours of credit in MUSG 383. May be repeated for credit.

MUSH - Music (History and Literature) Courses

MUSH 171. Global Perspectives in Music.  
(3-0-3); I.  
This course will expand the student's listening experience through a cross-cultural survey of concepts and styles of art and music. Topics will include non-Western music performance practices and styles from Africa, Eastern Europe, the Middle East, India, and Southeast Asia as well as music of the Americas, Western art, music and jazz. The importance of this course lies in the artistic and cultural concepts that influence music and their relevance to the study of music as an academic and performance discipline in the 21st century.

(3-0-3); I.  
A general education elective; does not apply toward fulfilling music degree requirements. Designed to introduce students to the humanities by exploring music in Western and non-western cultures. This course will aid in developing and understanding of different musical styles and listening skills. In addition, this course will foster an interest in a variety of musical styles and in embracing different cultures in an endeavor to create a more tolerant society. This interdisciplinary course satisfies the HUM I requirement for general education.

MUSH 267. World Cultures through the Humanities.  
(2-2-3); II.  
Designed for students to investigate world cultures and how the humanities (music, art, dance, and theatre) have been reflected through the historical time periods and how they are currently reflected in various cultures of the world.

MUSH 270. Multicultural Arts.  
(3-0-3); I.  
Interdisciplinary course designed to introduce students to the humanities by exploring literature, art, music, dance, film, alternative media, photography, and philosophy in Western civilization as well as some exploration into the non-western cultures of ancient India and China, contemporary India, China, Japan, Africa, and Islam. This interdisciplinary course satisfies the HUM I requirement for general education.

(2-0-2); on demand.  
Brief history; techniques of hymn and anthem playing and/or directing; planning the worship service.

MUSH 338. Traditional Music History I.  
(3-0-3); II.  
Students learn key components, ideas, persons, trends, styles and events in the development of roots music, prior to 1950.

MUSH 339. Traditional Music History II.  
(3-0-3); I.  
Prerequisite: MUSH 338 Traditional Music History I. This course is a study of the development of bluegrass, blues, country music and related styles and the impact of technological advances on the art form from the development of early commercial recording companies and the broadcast industry through the early days of the Internet.

MUSH 340. Traditional Music History III.  
(3-0-3); II.  
Prerequisite: MUSH 339 Traditional Music History II. This course provides an opportunity for students to learn key components, ideas, persons, trends, styles and events in the development and evolution of the style from the year 1960 to the present. The music which we are most involved stems from or is influenced by the music that is identified with the southern Appalachian mountain region, focusing on artists, trends, musical styles and events. Students will study the impacts of technological advances on the art form from radio and television to major motion pictures, the Internet and beyond.

MUSH 361. History of Music I.  
(3-0-3); I.  
Prerequisite: MUSH 171 or MUSH 267. A survey of the history of music in Western Europe from its ancient Greek beginnings through the early 18th century.

MUSH 362. History of Music II.  
(3-0-3); II.  
Prerequisite: MUSH 361. The history of music in Western Europe, Russia, and America from the 18th century to the present.

(3-0-3); on demand.  
A survey of African-American music in the U.S. from 1600 to present.

MUSH 365. Jazz History and Literature.  
(3-0-3); I.  
A survey of jazz history from its beginning (ca. 1850) to the present.

(3-0-3); II.  
A survey of the history of American music from colonial times to the present.
MUSH 481. Keyboard Literature. 
(3-0-3); I.
Survey of the keyboard music from the 16th century to present.

MUSH 490. School Band Literature. 
(2-0-2); on demand.
Examination and criticism of music for training and concert use by groups at various levels of attainment.

MUSH 491. Choral Literature. 
(2-0-2); I.
This course is a broad survey of choral music representing historical forms, eras, and styles. Literature appropriate for elementary and secondary ensembles will be emphasized. Topics include history of choral literature, performance practice and conducting issues, as well as practical application of the literature through programming for various types of choirs and concert situations.

MUSH 492. Solo Vocal Literature. 
(2-0-2); I.
A survey of the historical musico-poetic development of the art song with a look at its growth in Germany, Austria, France, Italy, Great Britain, the United States, Scandinavia, Spain, and eastern Europe from 1600 to present day.

MUSM - Music (Ensembles) Courses
Ensembles listed with two course numbers may be repeated for credit. After earning four hours of lower division credit (100 level), a student may enroll for upper division credit (300 level).

MUSM 200, 400. Student Recital. 
(0-1-0); I, II.
Music students and faculty present a recital each Thursday afternoon. Music students are required to take this course each semester.

MUSM 335. Clarinet Choir. 
(0-2-1); on demand.

MUSM 336. Woodwind Ensemble. 
(0-2-1); I, II.

MUSM 337. Jazz Combo. 
(0-2-1); I, II.
Jazz combos provide the opportunity for musicians to perform in small groups. Students will also have the opportunity to arrange and compose for these combos. This course may be repeated.

MUSM 345. Keyboard Chamber Music. 
(0-2-1); I, II.
An audition is required for the purpose of placing students in appropriate groups with appropriate repertoire. This course will expand the student’s repertoire for chamber music with keyboard instruments by performing from a cross section of various musical styles and periods. This course may be repeated.

MUSM 361. Trumpet Choir. 
(0-2-1); on demand.

MUSM 362. Trombone Choir. 
(0-2-1); on demand.

MUSM 363. Tuba and Euphonium Ensemble. 
(0-2-1); on demand.

MUSM 367. Brass Choir. 
(0-2-1); I, II.
Open to brass players.

MUSM 368. Brasswind Ensemble. 
(0-2-1); on demand.

MUSM 369. Percussion Ensemble. 
(0-2-1); I, II.

MUSM 370. Concert Band. 
(0-2-1); II.
Open to all students.

MUSM 371. Symphony Band. 
(0-2-1); II.
Open to all students.

MUSM 372. Marching Band. 
(0-5-1); I.
Open to all students. Required for wind and percussion music education students. Upper division credit after earning two hours of credit.

MUSM 378. String Ensemble. 
(0-2-1); on demand.

MUSM 379. Orchestra. 
(0-2-1); I, II.
Open to all string students and to selected wind and percussion players on demand.

MUSM 380. Jazz Ensemble I. 
(0-2-1); I, II.
Jazz ensemble provides the opportunity for musicians to perform and study the music of the large jazz ensemble. Jazz ensemble music incorporates many styles of jazz and commercial performance. Students will also have the opportunity to arrange and compose for this ensemble. This course may be repeated.

MUSM 381. Jazz Ensemble II. 
(0-2-1); I, II.
Open to all students.

MUSM 382. Jazz Vocal Ensemble. 
(0-2-1); I, II.
Open to all students.

MUSM 383. Traditional Music Ensemble. 
(0-2-1); on demand.

MUSM 384. Guitar Ensemble. 
(0-2-1); I, II.

MUSM 387. Accompanying. 
(0-2-1); I, II.
Two hours of studio accompanying per week.
MUSM 389. Keyboard Ensemble. (0-2-1); I, II.
Preparation and performance of piano ensemble literature.

MUSM 390. Vocal Ensemble. (0-2-1); on demand.

MUSM 391. University Chorus. (0-3-1); I, II.
Open to all University students interested in singing.

MUSM 392. Concert Choir. (0-2-1); I, II.
Open to all students.

MUSM 393. Chamber Singers. (0-3-1); I, II.
Selected group of 16 singers.

MUSM 394. OperaWorks. (0-2-1); on demand.
An introduction to the techniques of musical theatre with emphasis on the integration of music and action-dramatic study of operatic roles.

**MUSP - Music (Private Applied) Courses**

**MUSP 200, 400 Performance Class.**
*Prerequisite: consent of instructor.* Music major and minor students must register for MUSP 200 Performance Class (lower division) or MUSP 400 Performance Class (upper division) concurrently with Private Applied Lessons in the principal applied area. Performance Class receives no credit and is graded pass/fail, but attendance and performance in this course may affect the student’s grade in Private Applied Lessons.

**Private Applied Lessons.**
*Prerequisite: consent of instructor.* Development of performance skills through the study of various etudes, solos, and other literature. Private applied music courses are typically offered in the Fall and Spring terms and may be repeated for credit. One-two credit courses meet for 1/2 hour each week and three credit courses meet for one hour each week, for a minimum of 14 lessons each semester.

**100 level:** For students who have been admitted, on a probationary basis, to a music program of study, as determined by audition (Bachelor of Music Education, Bachelor of Music Performance, Bachelor of Arts in Music or the music minor). Also for nonmusic degree seeking students.

**200 level:** For students who are fully admitted to an undergraduate degree program in music or a music minor program, as determined by audition.

**300 level:** For Bachelor of Music Education majors, Bachelor of Music majors, and Bachelor of Arts music majors and minors taking private applied lessons on a secondary instrument. One credit courses meet for 1/2 hour each week for a minimum of 14 lessons each semester.

**400 level:** For students who have successfully completed all requirements of the Private Applied Upper Division Assessment. The Private Applied Upper Division Assessment requires successful completion of the Private Applied requirements at the 200-level with a minimum of "C," meet the criteria set for the primary applied area during the end-of-semester jury performances, and successful completion of MUSG 124, MUST 223, MUST 236, four semesters each of MUSP 200 and MUSM 200 with passing grade of "K," and two of the following: MUSH 161, MUSH 162, MUSH 361, MUSH 362.

MUSP 101, 201, 301, 401 Private Flute.
MUSP 102, 202, 302, 402 Private Oboe.
MUSP 103, 203, 303, 403 Private Bassoon.
MUSP 104, 204, 304, 404 Private Clarinet.
MUSP 105, 205, 305, 405 Private Saxophone.
MUSP 108, 208, 308, 408 Private Euphonium.
MUSP 109, 209, 309, 409 Private Trombone.
MUSP 110, 210, 310, 410 Private Tuba.
MUSP 116, 216, 316, 416 Private Harp.
MUSP 119, 219, 319, 419 Private Percussion.

MUSP 135, 235, 335, 435 Private Classical Guitar.
MUSP 136, 236, 336 Private Guitar.
MUSP 138a, 238a, 338a, 438a Private Bluegrass Banjo.
MUSP 138b, 238b, 338b, 438b Private Old Time Banjo.
MUSP 138c, 238c, 338c, 438c Private Mandolin.
MUSP 138d, 238d, 338d, 438d Private Traditional Guitar.
MUSP 138e, 238e, 338e, 438e Private Ctry. Electric Guitar.
MUSP 138g, 238g, 338g, 438g Private Dobro.
MUSP 138h, 238h, 338h, 438h Private Mountain Dulcimer.
MUSP 138i, 238i, 338i, 438i Private BG & Ctry. Fiddle.
MUSP 138j, 238i, 338j, 438j Private Old Time Fiddle.
MUSP 138k, 238k, 338k, 438k Private Celtic Fiddle.
MUSP 138v, 238v, 338v, 438v Private Traditional Voice.
MUSP 141, 241, 341, 441 Private Harpsichord.
MUSP 142, 242, 342, 442 Private Organ.
MUSP 143, 243, 343, 443 Private Piano.
MUSP 162, 262, 362, 462 Private Composition.
MUSP 163, 263, 363, 463 Private Conducting.
MUSP 234. Private Jazz.
\( (0-1-1; 0-2-2; 0-3-3); I, II \).
Prerequisite: consent of the instructor. Development of performance skills through the study of various repertoire, solos, and other literature. Private applied music courses are typically offered in the Fall and Spring terms. One credit courses meet for 1/2 hour each week and two or three credit courses meet for one hour each week, for a minimum of 14 lessons each semester. This course may be repeated.

MUSP 334. Private Jazz.
\( (0-1-1; 0-2-2); I, II \).
Prerequisite: consent of the instructor. Development of performance skills through the study of various repertoire, solos, and other literature. Private applied music courses are typically offered in the Fall and Spring terms. One credit courses meet for 1/2 hour each week and two credit courses meet for one hour each week, for a minimum of 14 lessons each semester. This course may be repeated.

MUSP 230. Private Composition.
\( (0-1-1; 0-2-2; 0-3-3); I, II \).
Prerequisite: consent of the instructor. Development of performance skills through the study of various repertoire, solos, and other literature. Private applied music courses are typically offered in the Fall and Spring terms. One credit courses meet for 1/2 hour each week and two or three credit courses meet for one hour each week, for a minimum of 14 lessons each semester. This course may be repeated.

MUST - Music (Theory and Composition) Courses
Music students should enroll in the appropriate music theory and music reading courses each semester until the completion of MUST 233 and MUST 237.

MUST 103. Practical Theory for Traditional Music.
\( (1-2-2); I, II, III \).
An introduction to music theory as applicable to tradition-based musical styles such as Bluegrass, country music, blues, and gospel. Areas covered include chord construction, various scales, harmony, transposition, etc.

MUST 104. Traditional Vocal Harmony.
\( (1-2-2); I, II, III \).
Prerequisite: MUST 103. Practical guidance in singing lead, tenor, baritone, and bass harmonies as they are performed in Bluegrass, country music, and gospel groups. Public performances are optional.

MUST 131. Music Theory I.
\( (2-2-3); I, II \).
Corequisite: MUST 133. An introduction to the basic elements of music theory followed by the study of diatonic functional harmonic elements including cadence types, seventh chords, and root position part-writing in SATB style. Melodic and rhythmic concepts will also be emphasized, and representative aural skills, analysis projects, and keyboard exercises will be included.

MUST 360. Junior Recital.
\( (0-3-3); I, II \).
Prerequisite: approval of the music faculty. Study and preparation with the appropriate private applied instructor of all components of a 30-minute solo recital performance.

MUST 434. Private Jazz.
\( (0-1-1; 0-2-2; 0-3-3); I, II \).
Prerequisite: consent of the instructor. Development of performance skills through the study of various repertoire, solos, and other literature. Private applied music courses are typically offered in the Fall and Spring terms. One credit courses meet for 1/2 hour each week and two or three credit courses meet for one hour each week, for a minimum of 14 lessons each semester. This course may be repeated.

MUST 470. Composition Recital.
\( (1-0-2); I, II, III \).
Prerequisite: approval of the music faculty. Preparation and performance in recital of student's compositions.

MUST 480. Private Applied Pedagogy.
\( (1-0-1); I \).
An examination of the literature related to teaching applied to music and to historical performance practices associated with the repertory of the major performing area.

MUST 499C. Senior Recital.
\( (3-0-3); I, II \).
Prerequisite: approval of the music faculty. A formal recital with an accompanying research paper and oral presentation covering the works and composers to be performed. This course satisfies the integrative component for general education.
MUST 133. Music Reading I.  
(0-2-1); I, II.  
Corequisite: MUST 131. An introduction to the concepts and applications of reading music, vocally and instrumentally. Movable-do based solmization will be utilized, as will basic conducting patterns. Emphasis will be on diatonic major and diatonic minor melodies in treble and bass clefs, and simple and compound meter rhythmic exercises generally adhering to the common stressed/unstressed pattern of beats within duple, triple, and quadruple meters.

MUST 135. Music Reading II.  
(0-2-1)  
Prerequisite: MUST 133. A continuation of MUST 133, with emphasis on increased chromaticism melodically in treble and bass clefs, and increased complexity in the area of meter and rhythm. Movable-do based solmization will be utilized, as will basic conducting patterns.

MUST 233. Music Reading III.  
(0-2-1); I, II.  
Prerequisite: MUST 135. Corequisite: MUST 236. A continuation of MUST 135, with emphasis on increased chromaticism melodically in treble, bass, alto, and tenor clefs. Rhythmic complexity will also increase through the study of irregular divisions in simple and compound meters. Movable do-based solmization will be utilized, as will basic conducting patterns.

MUST 234. Music Reading IV.  
(0-2-1); I, II.  
Prerequisite: MUST 233. Corequisite: MUST 237. A continuation of MUST 233, with emphasis on increased chromaticism melodically, including late Romantic and 20th-21st century chromaticism, modality, and atonality in treble, bass, alto, and tenor clefs using movable do-based solmization where applicable. Rhythmic/metric complexity will also increase through the study of asymmetric meter, shifting meters, composite meter, and other late Romantic through present day rhythmic/metric techniques. Basic and asymmetric conducting patterns will be utilized.

MUST 236. Music Theory III.  
(1-2-2); I, II.  
Prerequisite: MUST 132. Corequisite: MUST 233. A continuation of MUST 132, with emphasis on secondary dominants, chromatic harmony, and modulatory techniques. Part-writing in SATB style will be included, as will the study of larger formal structures. Melodic and rhythmic concepts will also be emphasized, and representative aural skills, analysis projects, and keyboard exercises will be included.

MUST 237. Music Theory IV.  
(1-2-2); I, II.  
Prerequisite: MUST 236. Corequisite: MUST 234. A continuation of MUST 236, with emphasis on harmonic, melodic, rhythmic, and formal elements from late Romanticism through the present day. Representative aural skills, keyboard, and an analytical term paper will be included. Students will gain a sense of overview by recognizing style characteristics, genre, form, period and composer for a variety of compositions from the Medieval Period through the present day via visual and aural score shows.

MUST 240. Jazz Theory.  
(2-0-2); I.  
Prerequisite: MUST 132. This course will equip the student with the vocabulary, notation conventions, voicing norms, and chord/scale relationships associated with the practice of theory in a jazz or jazz related context.

MUST 263. Elementary Composition I.  
(1-1-2); on demand.  
Prerequisite: MUST 237 or consent of instructor. Study and practice of basic formal compositional principles.

MUST 264. Elementary Composition II.  
(1-1-2); on demand.  
Prerequisite: MUST 263. Continuation of MUST 263.

MUST 331. Counterpoint.  
(2-0-2); on demand.  
Prerequisite: MUST 237. Writing of 16th and 18th century strict and free counterpoint, cannon, invention, fugue. Some 20th century techniques.

MUST 345. Aural Skills.  
(2-0-2); I.  
Prerequisites: MUST 103. This course provides an opportunity for students to learn the essential elements of sight reading, sight singing and ear training as it applies to Traditional Music.

MUST 363. Intermediate Composition I.  
(1-1-2); on demand.  
Prerequisite: MUST 264. Study and writing of original creative work. One hour weekly in private study; one hour in composition seminar-colloquium.

MUST 364. Intermediate Composition II.  
(1-1-2); on demand.  
Prerequisite: MUST 363. A continuation of MUST 363.

MUST 430. Arranging.  
(2-0-2); on demand.  
Prerequisite: MUST 237 or equivalent. Scoring, arranging, transcribing of selected or original materials for voices and/or instruments.

MUST 432. Advanced Arranging.  
(2-0-2); on demand.  
Prerequisite: MUST 430. Continuation of MUST 430.

MUST 433. Arranging for Jazz Ensembles I.  
(2-0-2); on demand.  
Prerequisite: MUST 432. Techniques of arranging for large and small jazz ensembles.

MUST 434. Arranging for Jazz Ensembles II.  
(2-0-2); on demand.  
Prerequisite: MUST 433. Continuation of MUST 433.

MUST 445. Chart Writing and Application.  
(3-0-3); II.  
Prerequisites: MUST 345. This course provides an opportunity for students to learn advanced elements and techniques of sight reading, sight singing and ear training as it applies to Traditional Music.
MUST 461. Advanced Composition I.  
(1-1-2); on demand.  
Prerequisite: MUST 364. Study, writing, and performance of students' original creative work. Private conferences and composition seminar in colloquium.

MUST 462. Advanced Composition II.  
(1-1-2); on demand.  
Prerequisite: MUST 462. Continuation of MUST 461.

MUST 465. Form and Analysis.  
(2-0-2); on demand.  
Prerequisites: MUST 233 and 237. A study of the elements of musical design through aural and score analysis.

MUSW - Music (Research) Courses

(2-0-2); II.  
This course gives an overview of the music industry including copyright law, publishing, contracts, management, licensing and merchandising, A&R, publicity, advertising, marketing, private studio management, grants, and taxation. Students will gain an overall understanding of the people, technologies, and laws that affect all aspects of the music business. This course is essential for any student wishing to pursue a career in the music industry.

MUSW 325. Music Recording and Sound Reinforcement  
(3-0-3); II.  
An introduction to basic recording and sound reinforcement techniques. Topics covered include microphone choice and placement, signal flow, signal processing with outboard and plug-in processors, digital recording, digital editing, and live recorded sound mixing and mastering.

MUSW 476. Special Problems in Music.  
(1 to 3 hrs.); I, II, III.  
Prerequisite: consent of department chair. Independent study and research in an area of the student’s choosing. Requires completion of paper or other tangible evidence of the results of the study.

MUSW 499C. Senior Project.  
(0-3-3); I, II.  
Prerequisite: approval of the music faculty. This course allows the student to develop an interdisciplinary capstone (with approval of private applied instructor) synthesizing their music specialization with their Bachelor of Arts minor area. This course project will emphasize oral and written communication skills. This course satisfies the integrative component for general education.

NURA - Nursing (Associate) Courses

NURA 103. Nursing I.  
(4-6-6); I, II.  
Prerequisites: BIOL 234, BIOL 235, ENG 100, MATH 135 and official admission into the Associate Degree Nursing Program.

Corequisites: Computer competence, ENG 200, FYS 101 and PSY 154. Emphasis is on wellness, health promotion and health maintenance throughout the life span. Students are introduced to nursing theories and begin to use the nursing process to assess, diagnose, plan, treat, and evaluate individual responses to common physical, psychological, and social elements of the environment. Students begin to develop theoretical and clinical competence while caring for patients in health care and community settings.

NURA 107. Nursing II.  
(5-9-8); I, II.  
Prerequisite: "C" or better in NURA 103. Corequisite: BIOL 217. This course is a continuation of NURA 103-Nursing I and continues to focus on wellness, health promotion, and health maintenance issues. Emphasis is on an individual and human needs approach, the role of the associate degree nurse and use of the nursing process to address acute illness, surgical care of clients across the lifespan and the care of childbearing patients and newborns. Students develop theoretical and clinical competence while caring for childbearing patients, newborns and medical-surgical patients with acute illness.

NURA 111. Paramedic/ADN Transition Course.  
(4-6-6); I, II.  
Prerequisites: successful completion of a National Standard Curriculum Paramedic Course, equivalent of one year work experience as a paramedic, and BIOL 234, BIOL 235, ENG 100, ENG 200, MATH 135, CIS 101, FYS 101, PSY 154 with a minimum grade of "C." Corequisites: COMM 108, PSY 156. Restriction: must hold an active paramedic national certification, with no restrictions. This course is designed to facilitate the role transition from a Nationally Certified Paramedic to an associate degree nurse. Emphasis is on roles of the associate degree nurse, and is focused on the application of the nursing process in basic, medical-surgical, and maternity nursing. Following admission into the Associate Degree Nursing Program and successful completion of NURA 111 with a grade of "C" or higher, "K" credit will be awarded for NURA 103: Nursing I, NURA 104: Nursing II and NURA 105: Maternal Newborn Nursing. No more than one year may lapse between completion of NURA 111 and admission into the Associate Degree Nursing Program.

NURA 201. Nursing III.  
(5-9-8); I, II.  
Prerequisite: "C" or better in NURA 107 or NURA 111. Corequisites: COMM 108 and Humanities I or Humanities II elective. This is the first course in the second year of the ADNP. The course builds on concepts and practice from the first year. Emphasis is on the use of the nursing process to address chronic alterations in the mental and physical health of individuals across the lifespan. Students develop theoretical and clinical competence while caring for chronically ill patients.

NURA 208. Transition to Practice.  
(2-0-2); I, II.  
Prerequisite: "C" or better in NURA 201. Corequisite: NURA 209. This course integrates concepts needed to function in the role of the associate degree nurse as provider of care, manager of care, and member of the discipline of nursing. Students continue to integrate nursing concepts, issues and evidence based practice guidelines to promote effective transition to practice.
NURA 209. Nursing IV.  
(5-15-10); I, II.  
Prerequisite: "C" or better in NURA 201. Corequisite: NURA 208.  
This course incorporates the major roles of the Associate Degree Nurse as provider of care, manager of care and member within the discipline of nursing into the care of individuals with complex and critical illnesses. Integration of the role of the registered nurse into practice will be provided through an integrated practicum of 120 hours of concentrated clinical experience of direct patient care in health care organizations.

NURB - Nursing (Bachelor's) Courses

NURB 260. Wellness and Health Promotion.  
(2-0-2); I.  
Restriction: admission to the BNP Program, pre-licensure component. This course emphasizes wellness, health promotion and health maintenance strategies that can reduce morbidity and mortality, and promote healthy lifestyles of individuals and families from diverse cultures across the lifespan. Students are introduced to the application of professional nursing standards and use of the nursing process.

NURB 262. Foundational Skills for Professional Nursing.  
(4-6-6); I.  
Restriction: admission to the BNP Program, pre-licensure component. This course provides a foundation for progression through the program and introduces basic biopsychosocial and health assessment skills needed for the role and function of the professional nurse. Fundamental concepts of therapeutic communication and pharmacology are included.

NURB 264. Family Health Nursing.  
(4-6-6); II.  
Prerequisite: NURB 262. This course emphasizes theories and concepts related to the childbearing and childrearing families from diverse cultures. Using the nursing process, students promote family health with a focus on health promotion and maintenance during pregnancy and in children from birth through adolescence.

NURB 266. Community-Based Nursing Care.  
(3-6-5); II.  
Prerequisite: NURB 262. This course emphasizes health promotion, disease prevention, national health objectives and the role of the nurse in providing community-oriented care for healthy individuals, families and groups from diverse cultures across the lifespan.

NURB 320. Care of Older Adults.  
(3-6-5); I.  
Prerequisite: NURB 266. In the provision of nursing care, emphasis is on health promotion and health maintenance strategies for the physical, developmental and psychosocial dimensions of the older adult from diverse cultures.

NURB 322. Mental Health Nursing.  
(2-6-4); I.  
Prerequisite: NURB 266. This course emphasizes theories and concepts related to the nursing care of individuals and families who have alterations in mental health. Using the nursing process, students participate in an interdisciplinary approach in the provision of nursing care to individuals and families. Emphasis is placed on interpersonal functioning and ethical issues that are relevant to mental health care.

NURB 324. Acute Alterations in Adult Health I.  
(4-9-7); II.  
Prerequisite: NURB 322. This course is the first in a two-part series of courses in acute alterations in adult health. The focus of this course is on providing nursing care with an interdisciplinary approach to individuals and families of diverse cultures, throughout the life span, who have common acute alterations in health. Focus is also placed on ethical issues that are prevalent in the acute care setting.

NURB 326. Advanced Health Assessment  
(1-3-2); I, II.  
Restriction: RN license or junior standing in the Baccalaureate Pre-licensure component. This course focuses on advanced performance of comprehensive physical and psychosocial health assessments as related to the role and function of the professional nurse. Emphasis is on wellness, health promotion and health maintenance strategies for individuals from diverse cultures across the lifespan. Students build upon the foundation of previous assessment skills.

NURB 327. Transition to Professional Nursing Practice.  
(4-0-4); I, II.  
Restriction: Baccalaureate post-licensure students — registered nurses. Emphasis of this course is on the socialization and role transition of the registered nurse to professional nursing. Essential content includes concepts and theories of health, professional nursing standards, culture, and community based care and the nursing process.

NURB 361. Introduction to Nursing Research.  
(3-0-3); II.  
Prerequisites: successful completion of the first five semesters of the BNP curriculum or admission to the RN (Post-Licensure) Track, MATH 135 and 353. An introduction to the research process and utilization of nursing research as the basis for professional nursing practice. Focus is on the critiquing of nursing research to determine reliability and validity.

NURB 420. Acute Alterations in Adult Health II.  
(4-9-7); I.  
Prerequisite: NURB 324. This course is a continuation of Acute Alterations in Adult Health I. This course focuses on an interdisciplinary approach to providing nursing care for individuals and families of diverse cultures throughout the life span, who have complex acute alterations in health. Emphasis is placed on progressive measures that sustain life and the ethical issues that are prevalent in the acute care setting.

NURB 422. Chronic Alterations in Health.  
(3-6-5); I.  
Prerequisite: NURB 326. This course focuses on the provision of nursing care to persons across the life span who are experiencing a variety of chronic alterations in health/terminal illnesses. Empha-
NURS 100. Orientation to Health Care Professions.
(1-0-1).
A study of career opportunities available in health care, the standard program requirements and an overview of the job responsibilities. Equates with IMS 100.

NURS 120. Dosage Calculation for Health Care Professionals.
(2-0-2); I, II.
Prerequisite: "C" or better on MATH 091 or minimum ACT Math subscore of 18. Increase the ability of health care professional majors to safely and accurately calculate medication dosages.

(2-0-2); I, II.
The study of vocabulary components and terms related to sciences and medicine. Previous knowledge of medicine or related discipline is not necessary. Equates with IMS 202.

NURS 300. Ethical and Legal Issues in Health Care.
(3-0-3); I, II.
This course is an overview of the ethical and legal issues in today's health care environment. Emphasis includes such areas of discussion as confidentiality, HIV/AIDS, artificial life support, euthanasia, abortion, genetic science. Allocation of resources and professional gatekeeping. Equates with IMS 300.

NURS 301. Selected Topics.
(1 to 3 hrs.); on demand.
Prerequisite: consent of instructor. Investigation of specific topics of interest related to nursing and/or allied health sciences. Equates with IMS 301.

NURS 302. Health Maintenance Throughout the Life Span.
(3-0-3); I, II.
This course is designed to increase one's awareness of the importance of health maintenance throughout the life span. Emphasis will be on the concepts of health maintenance through health promotion and illness prevention strategies for all stages of the life span. Equates with IMS 302.

NURS 303. Women's Health Care.
(3-0-3); I, II.
Prerequisites: COMM 108, ENG 100, 200, or consent of instructor. Increase one's awareness of the importance of women's health care in all dimensions. Emphasis will be placed on health maintenance issues for women that include women's developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns. Equates with IMS 303 and WST 474.

NURS 304. Men's Health Issues.
(3-0-3); I, II.
Prerequisites: COMM 108, ENG 100, 200. This course is designed to increase one's awareness of the importance of men's health issues in all dimensions. Emphasis will be placed on health maintenance issues for men that include men's developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns. Equates with IMS 304.

NURS 305. Health Care Environment.
(3-0-3); I, II.
Prerequisites: COMM 108, ENG 100, 200. This course is designed to increase one's awareness of the importance of health care environment. Emphasis will be placed on health maintenance issues for men that include men's developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns. Equates with IMS 305.

(3-0-3); II.
This course is a survey course of health care delivery in the United States, which will allow students to gain a more global picture of health care and public health services.
(3-0-3); I, II.  
Through this course, the student will develop a global awareness of societal aspects of health and disease through the critical examination of the sociopolitical constraints in health and health care of populations. The roles of community, national, and international health organizations will be examined. Equates with IMS 345 and IST 345.

NURS 349. Pharmacology.  
(3-0-3); I, II.  
Open to licensed nurses and students from health related disciplines. The introductory study of pharmacological agents used to promote, maintain, and restore health. Focuses on concepts of medication administration and the role and function of the professional nurse as related to pharmacological agents. Three hours of theory per week.

NURS 361. Leadership for the Health Care Professional.  
(3-0-3); I, II.  
This course provides students with a knowledge base and foundation for the study and practice of leadership in health care systems. Emphasis is placed on the theories of leadership, structures of organizations in health care, and the effective/efficient use of human and material resources. Equates with IMS 361.

NURS 473. Health Care Management of Children.  
(3-0-3); I, II.  
Open to any interested student. Promotion of wellness of children and adolescents with emphasis on meeting the health care needs of children in the classroom and home. Discussion of basic first aid, common acute and chronic illness in children. Equates with IMS 473.

(3-0-3); I, II.  
Open to any interested student. A study of the biopsychosocial factors inherent with the sexuality of human beings and their influences on behavior. Equates with IMS 475.

NUTR - Nutrition Courses

(3-0-3); I, II.  
This course will cover the fundamental concepts of nutrition: terminology, physical and chemical properties of nutrients, food sources and functions. This course will include the body’s utilization of food, nutrients, and calories (absorption, transport, and metabolism). This course presents the core information for the introduction to the applied science of nutrition. This course will explore what Americans are eating, dietary guidelines and recommended nutrient intakes for Americans, and the important relationship between diet and health. This course satisfies the NSC I requirement for general education.

(3-0-3); I, II.  
Basic description of the elements of human nutrition, their function in the body, and food sources. Guide for healthy nutritional practices and nutritional needs throughout the life cycle. Equates with HLTH 206.

PHED - Physical Education Courses

PHED 100. Golf.  
(0-2-1); I, II, III.  
Emphasis on skill, knowledge, and techniques for individual participation.

PHED 101. Tennis.  
(0-2-1); I, II, III.  
Emphasis on skill, knowledge, tactics, and techniques for individual participation.

PHED 102. Badminton.  
(0-2-1); I, II.  
Emphasis on skill, knowledge, tactics, and techniques for individual participation.

PHED 103. Archery.  
(0-2-1); I, III.  
Emphasis on skill, knowledge, tactics, and techniques for individual participation.

PHED 104. Gymnastics.  
(0-2-1); I.  
Emphasis on self-testing activities.

PHED 105. Conditioning.  
(0-2-1); I, II.  
Emphasis on developing fitness through a variety of exercises and activities.

(0-2-1); I, II.  
Basic movement skills involved in bowling.

PHED 108. Restricted Physical Education.  
(0-2-1); I, II.  
Students with either a structural or functional problem. May be repeated one time for credit.

(0-2-1); I, II.  
Equates with AGR 109.

(0-2-1); I, II.  
Activity course in basic martial arts techniques and etiquette, plus self-defense concepts and strategies.

PHED 113. Soccer.  
(0-2-1); II.  
Techniques and participation in soccer.

PHED 117. Stunts and Tumbling.  
(0-2-1); I, II.  
Skills that promote strength, individual control and development, and group perfection.

PHED 118. Volleyball.  
(0-2-1); I, II.  
Rules, techniques, and participation in volleyball.
PHED 120. Basic Rhythms. 
(0-2-1); I, II. 
Skills and knowledge in fundamentals of dance.

PHED 121. Modern Dance. 
(0-2-1); I. 
Movement as means of self-expression.

PHED 122. Social Dance. 
(0-2-1); I, II. 
Steps and combination of popular dances.

PHED 123. Folk and Square Dancing. 
(0-2-1); I, II. 
Movements of American square dance.

PHED 125. Basketball Skills. 
(0-2-1); I, II. 
Skills of basketball.

PHED 126. Team Sports. 
(0-2-1); II or on demand. 
Emphasis on skill, knowledge and strategy through practice and participation in at least three team sports which may include basketball, soccer, softball, ultimate disc, volleyball, or other team sports. This is a credit/no credit course. This course does not meet requirements for physical education teaching.

PHED 127. Racquetball. 
(0-2-1); I, II. 
Emphasis on skill, knowledge, and strategy.

PHED 130. Beginning Swimming. 
(0-2-1); I. 
Learning to swim well enough to care for one’s self under ordinary conditions.

(0-2-1); I. 
Perfection of standard strokes, diving.

PHED 132. Lifesaving. 
(0-2-1); I, II, III. 
Rescue methods in all types of water.

PHED 133. Instruction to Water Safety. 
(0-2-1); II, III, on demand. 
Prerequisite: current Senior Lifesaving Certificate. Teaching methods and techniques in lifesaving.

PHED 140. Aerobics. 
(0-2-1); I, II. 
Emphasis on knowledge, techniques, aerobic fitness and safety methods involved with individual participation in a variety of aerobic formats.

PHED 141. Weight Training. 
(0-2-1); I, II. 
Emphasis on knowledge, techniques, methods, and training program development for those interested in strength development.

PHED 142. Softball. 
(0-2-1); I, II. 
Emphasis on skill and performance enhancement, as well as increasing basic knowledge and strategic background.

PHED 143. Backpacking and Orienteering. 
(0-2-1); I, II, III. 
Designed to develop a working knowledge pertaining to the fundamentals of survival camping. Focus on the development of stamina and physical endurance. Nine-week class.

PHED 204. Officiating. 
(2-0-2); I, II. 
Interpretation of rules for major sports. Methods and techniques of officiating; laboratory experience in officiating.

PHED 205. Lifetime Fitness (A Scientific Approach). 
(2-2-3); I, II, III. 
Prerequisite: complete physical examination within last year. Designed to provide the student with scientifically-based knowledge concerning practical application of physical fitness training and evaluation procedures while participating in a fitness program.

PHED 211. Lifeguard Training. 
(1-2-2); II, III, on demand. 
Prerequisite: PHED 132 or CPR card. Responsibilities of lifeguards, equipment, health and sanitation, and inspection of waterfront areas.

PHED 212. Games and Rhythms for Elementary Teachers. 
(3-0-3); I. 
Designed to expose students to a broad range of elementary school rhythmic activities and games, as well as provide opportunities to teach these activities.

PHED 213. Methods of Teaching Individual Sports. 
(0-2-1); I. 
This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to at least three different individual activities so they are prepared to include these activities in a school’s physical education curriculum.

PHED 214. Methods of Teaching Racket Sports. 
(0-2-1); II. 
This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to at least three different racket activities so they are prepared to include these activities in a school’s physical education curriculum.

PHED 215. Methods of Teaching Team Sports. 
(0-2-1); I. 
This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to at least three different team sports or activities so they are prepared to include these activities in a school’s physical education curriculum.
PHED 216. Methods of Teaching Lifetime Sports.  
(0-2-1); I.  
This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to at least three different lifetime sports or activities so they are prepared to include these activities in a school’s physical education curriculum.

PHED 217. Methods of Teaching Gymnastics and the Martial Arts.  
(0-2-1); I.  
This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to stunts, tumbling, and one martial art form so they are prepared to include these activities in a school’s physical education curriculum.

PHED 218. Methods of Teaching Dance.  
(0-2-1); II.  
This course is designed to prepare students to develop safe and appropriate learning activities, content delivery, and assessment skills as these pertain to a variety of dance forms so they are prepared to include these activities in a school’s physical education curriculum.

PHED 220. Athletic Training I.  
(3-0-3); I.  
Prerequisites: BIOL 234 and HLTH 151. An introduction to athletic training, including basic injury prevention, management, and rehabilitation principles.

PHED 221. Therapeutic Modalities.  
(1-2-2); I.  
Prerequisites: HLTH 151 and PHED 220. Study and use of therapeutic modalities for athletic injury, treatment, and rehabilitation.

PHED 301. Evaluation in Exercise Science.  
(3-0-3); II.  
Methods, techniques, and procedures used in evaluation of students in physical education and recreation.

(3-0-3); I, II.  
Study of structural and mechanical factors in human motion.

PHED 311. Movement Exploration.  
(2-2-3); I, II, III.  
Child-centered program with the demonstration of methods whereby a child may learn to move experimentally, expressively, and efficiently.

(3-0-3); II.  
Understanding the principles of motor development and learning to use these when teaching students at various developmental stages, to promote optimal learning.

PHED 326. Exercise Program Leadership.  
(2-2-3); II.  
Emphasis on leadership skills, motivational techniques, choreography, administrative functions dealing with equipment purchase, organization and use, and experiences in aerobic exercise and personal training formats.

(3-0-3); I.  
Prerequisite: BIOL 234 or consent of department chair. A study of the physiological, biomechanical, and nutritional dimensions of the coaching of sports.

(3-0-3); I.  
A study of the physiological, biomechanical, and administrative aspects of designing and supervising strength and conditioning programs for various sports.

PHED 336. Foundations of Sport Psychology.  
(3-0-3); I, III.  
Prerequisite: PSY 154 or consent of department chair. Focus on theories and practices which when understood and used can enhance the coach-athlete relationship and improve sport performance.

PHED 340. Athletic Training II.  
(3-0-3); II.  
Prerequisites: BIOL 234 and PHED 220. Corequisites: PHED 221 and 341. An advanced course involving all aspects of the athletic training/sports medicine field.

PHED 341. Athletic Injury Assessment.  
(1-2-2); II.  
Prerequisites: PHED 220 and 340. Evaluation of athletic injuries.

PHED 350. Coaching of Sport.  
(1-2-2); I, II, on demand.  
May be repeated as separate sections. Students will demonstrate knowledge of sport and develop and implement sport specific experiences to improve their ability to coach effectively: a) baseball, b) basketball, c) cross country, track, and field, d) football, e) golf, f) soccer, g) softball, h) swimming, i) tennis, j) volleyball, or k) wrestling.

PHED 420. Administration of School Athletic Programs.  
(3-0-3); I, II.  
Administrative principles and procedures applicable to school athletic program.

PHED 423. Exercise Management: Special Populations.  
(3-0-3); I.  
Prerequisite: PHED 432. This course will provide the students with experience in exercise management for persons with chronic disease and/or disability and to understand the integrated model of care to coordinate exercise with other aspects of health care.

PHED 424. Introduction to Therapeutic Exercise.  
(3-0-3); II.  
Prerequisite: PHED 306 or BIOL 234. Study and use of exercise and various techniques and modalities to rehabilitate and improve function in a variety of populations including athletes and those with orthopedic limitations.
PHED 430. The Psychosocial Dimensions of Sport and Physical Activity.  
(3-0-3); II.  
Understandings regarding the psychological and sociological factors influencing performance in physical activities.

PHED 432. Physiology of Exercise.  
(3-0-3); I, II.  
Study of response of the body to muscular activity; work and efficiency, cardiorespiratory adjustment, training, and fitness. Laboratory experiences are an integral part of this course.

(3-2-4); I.  
Prerequisite: PHED 432 or BIO 234. Knowledge and skills in the area of fitness evaluation, exercise prescription and delivery of exercise programs to normal/special populations.

PHED 450. Planning and Managing Exercise Programs.  
(3-0-3); II.  
Emphasis upon knowledge, methods in planning, designing, managing and improving exercise programs. Provides a sound scientific basis and a practical foundation for students interested in the exercise field and for professionals in the fitness field.

PHED 453A. Corporate Practicum.  
(0-9-3); I, II, III.  
Prerequisites: completion of PHED 432 and PHED 450. This course will provide students with practical experiences in a corporate fitness/wellness and performance setting.

PHED 453B. Clinical Practicum.  
(0-9-3); I, II, III.  
Prerequisites: completion of PHED 432 and prerequisite or corequisite PHED 441. This course will provide students with practical experience in a clinical based setting that includes cardiac rehabilitation.

PHED 453C. Clinical Internship in Kinesiotherapy.  
(0-9-3); I, II, III.  
Prerequisite: completion of PHED 432 and prerequisite or corequisite PHED 424. Application of knowledge in kinesiotherapy in clinical settings, including experience in neurology, orthopedics, pediatrics, psychiatric and geriatric departments.

PHED 476. Special Problems in Physical Education.  
(1 to 3 hrs.); I, II.  
Prerequisite: senior standing and department chair or advisor permission. Designed to meet special needs of individual students. Intensive study of approval specific problems from an area of physical education.

PHED 475. Adapted Physical Education.  
(2-2-3); I.  
Characteristics of exceptional students with disabilities and means whereby these students can be aided by physical education. On-site adapted physical education clinic is an integral part of the course.

PHED 477. Coaching Internship.  
(0-6-3); I, II, III.

PHIL - Philosophy Courses

PHIL 100. Beginning Philosophy.  
(3-0-3); I, II, III.  
An introduction to the philosophical study of assumptions, ideas, and arguments about reality, knowledge, value, and beauty. This course satisfies the HUM I requirement for general education.

PHIL 103. Beginning Ethics.  
(3-0-3); I, II, III.  
An introduction to the basic principles and theories of ethics, and their application to selected moral issues and cases from the past and present. Selected for study will be some of the following: equality, affirmative action, minority rights (women, American Indians, Latinos, Asians, Gays), medical and biological ethics, religion and morality, law and morality, business ethics, military ethics, war and terrorism, abortion, euthanasia, capital punishment, poverty and welfare, sexual moralities, marriage and family, liberty and drug use, pornography, censorship, lying, and cheating. This course satisfies the HUM I requirement for general education.

PHIL 106. Beginning Logic.  
(3-0-3); I.  
An introduction to the basic elements of logic, including deductive and inductive reasoning, designed to enhance one's ability to discover and evaluate logical structure in various media. This course satisfies the HUM II requirement for general education.
PHIL 200. Introduction to Philosophy.  
(3-0-3); I, II, III.  
An introduction to some of the central problems of philosophy, such as problems about free will, personal identity, knowledge, the nature of reality, right and wrong, and the meaning of life.

PHIL 303. Ethics.  
(3-0-3); II.  
An examination of moral principles and their application to selected issues. Issues may include bio-medical ethics, abortion, euthanasia, capital punishment, affirmative action, poverty and hunger, sexual morality, marriage, lying, cheating, lifestyle and personality, business practices, and so on.

PHIL 306. Introduction to Logic.  
(3-0-3); I, II, III.  
An introduction to the central questions in logic: What makes reasoning valid or invalid? How can we test reasoning in order to decide whether or not it is strong? What are the main kinds of reasoning and mistakes in reasoning?

PHIL 307. Philosophy of Religion.  
(3-0-3); on demand.  
Basic issues in philosophy of religion. For example: Are there good arguments for or against the existence of the God worshiped by traditional theists (Judaism, Christianity, Islam)? Why is there evil? What is the relationship between faith, revelation, and evidence? Do people survive death?

PHIL 308. Philosophy of the Arts.  
(3-0-3); on demand.  
Major theories of art, aesthetic experience, the structure of art, problems in aesthetics, and art criticism.

PHIL 312. Symbolic Logic.  
(3-0-3); on demand.  
An introduction to symbolic logic: How can we use symbols to represent claims and test arguments? What are the philosophical implications of contemporary developments in symbolic logic?

PHIL 313. American Philosophy.  
(3-0-3); I.  
Examination of the writings of leading representatives of American philosophy with special emphasis on the writings of the "classical" period.

PHIL 320. Eastern Philosophy.  
(3-0-3); on demand.  
An examination of the major philosophical theories of Hinduism, Buddhism, Confucianism, and Taoism. Equates with IST 321.

PHIL 321. The Meaning of Life.  
(3-0-3); on demand.  
An investigation of various aspects of the philosophical problem of the meaning of life.

PHIL 333. Environmental Ethics.  
(3-0-3); I, II.  
Prerequisite: at least sophomore standing. An introduction to environmental ethics. Consideration to ethical theories and values as they apply to the natural environment. Emphasis on ethical aspects of such practical issues as preserving wilderness areas and wetlands, species extinction, population dynamics, forestry and mining policies, waste disposal, recycling, animal rights and liberation, domestic uses of animals and pets, sustainable agriculture, pesticide and herbicide usage, the status of embryos, genetics, biotechnology, animals as food, animal experimentation, economics, and the impact of environmental policies on diverse cultures and developing nations.

PHIL 341. Philosophy and Death.  
(3-0-3); on demand.  
An exploration of the central philosophical questions concerning death: What is death? Is death good, bad, or neutral? Is death something to be feared? What happens after we die?

PHIL 351. Philosophy of Love and Sex.  
(3-0-3); on demand.  
An exploration of the central philosophical questions concerning love and sex, with reference to classical and contemporary sources: What is love? Why do we love people? Are there different kinds of love? What is sex? What makes sex bad or good, right or wrong? What is the relationship between sex and love, if any? Equates with WST 351.

PHIL 355 Ancient and Medieval Philosophy.  
(3-0-3); I.  
The history of Western philosophy from its ancient origins through the medieval period and the beginning of the Renaissance.

PHIL 356. Modern and Contemporary Philosophy.  
(3-0-3); II.  
A history of Western philosophy from Renaissance to the present.

PHIL 361. Social and Political Philosophy.  
(3-0-3); on demand.  
An exploration of the central issues in social and political philosophy, such as the nature of justice, equality, freedom, political authority, and the relationship between politics, religion, and ethics.

PHIL 389. Honors Seminar in Philosophy.  
(3-0-3); on demand.  
Prerequisite: admission to Honors Program. Contemporary moral issues are examined, discussed, and evaluated. The topics may vary from semester to semester.

PHIL 399. Special Courses.  
(1 to 3 hrs.); on demand.  
Prerequisite: variable. These courses are usually specialized offerings in philosophy for the advanced undergraduate student. The purpose of these courses is to enhance the existing program in philosophy.

PHIL 400. Philosophy of Science.  
(3-0-3); II.  
An examination of basic issues in the philosophy of science, such as scientific progress and cumulativeness, the nature of scientific explanation, the nature of scientific evidence, scientific realism, the relation between theory and observation, and the relation between science and value.

PHIL 403. Ethical Theory.  
(3-0-3); on demand.  
Prerequisite: at least one course in philosophy. Study and analysis
PHIL 410. Current Philosophy. (3-0-3); on demand.
An examination, interpretation, and evaluation of the ideas of leading representatives of 20th century philosophies.

PHIL 420. Metaphysics. (3-0-3); on demand.
Prerequisite: at least one course in philosophy. An examination of the ultimate nature of reality, including (for example) the nature of time, space, and causation, the nature of identity and substance, the relation between particulars and universals, and the nature of mind and freedom.

PHIL 430. Epistemology. (3-0-3); on demand.
Prerequisite: at least one course in philosophy. An introduction to the central issues in epistemology: What is knowledge? When are beliefs rational, warranted, or justified? Do we know anything? How?

PHIL 476. Special Problems. (1 to 3 hrs.); on demand.
Prerequisite: permission of instructor. The student selects an approved topic in philosophy on which to do a directed study.

PHIL 499C. Senior Seminar in Philosophy. (3-0-3); I.
Prerequisites: senior standing and either 15 hours in philosophy or consent of the philosophy faculty. Examination, in a seminar setting, of issues and opportunities for philosophy majors. This course satisfies the integrative component for general education.

PHYS - Physics Courses

PHYS 109. History of the Universe. (3-0-3); I, II.
A conceptual approach to the ideas of modern astrophysics and cosmology for nonscientists. The ideas of classical physics. Einstein's theory of relativity, quantum mechanics, fundamental particles and forces, matter and antimatter, modern cosmology, and the Big Bang theory will be explored. This course satisfies the NSC II requirement for general education.

PHYS 110. Concepts in Astronomy. (3-0-3); I, II.
An introduction to the study of astronomical phenomena: motions of the sky, planetary science, the sun as a star, solar astrophysics, stars and stellar evolution, and cosmology-the structure and evolution of the universe.

PHYS 199. Selected Topics. (1 to 6 hrs.); on demand.

PHYS 201. Elementary Physics I. (3-0-3); I, II, III.
Prerequisite: one of the following: CHEM 111, MATH 141, 174, 175, "C" or better in MATH 152 or ACT math subscore of 22 or above. Kinematics, laws of motion, work and energy, impulse and momentum. Gravitation, rotation and equilibrium. Elasticity, fluids and simple harmonic motion. Heat, heat transfer, thermodynamics, waves and sound.

PHYS 201A. Elementary Physics I Laboratory. (0-2-1); I, II, III.
Corequisite: PHYS 201. Laboratory for PHYS 201.

PHYS 202. Elementary Physics II. (3-0-3); I, II, III.
Prerequisite: PHYS 201 or ITEC 141. Electricity and magnetism, light and optics, atomic and nuclear physics.

PHYS 202A. Elementary Physics II Laboratory. (0-2-1); I, II, III.

PHYS 211. Circuits. (3-2-4); on demand.
Prerequisite: MATH 275. Corequisite: PHYS 232. Linear circuits consisting of passive and active circuit elements; sinusoidal-forcing functions and phasors; steady-state response.

PHYS 220. The Science of Music. (3-0-3); I, II.
Prerequisite: MATH 123 or above, or ACT math subscore of 18 or higher, or consent of instructor. Not applicable credit toward a physics major or minor, or the area of concentration in physics. Properties of waves and sound; the hearing process; musical scales; production of music by wind, string, and electronic instruments; electronic recording, reproduction, and amplification; architectural acoustics.

PHYS 221. Statics. (3-0-3); II.
Prerequisites: MATH 275 and PHYS 231. Vector algebra, moments of force, equivalent force systems, equilibrium, trusses, frames, beams, friction, centroids and moments of inertia.

PHYS 231. Engineering Physics I. (4-0-4); I.

PHYS 231A. Engineering Physics I Laboratory. (0-2-1); I.
Corequisite: PHYS 231. Laboratory for PHYS 231.

PHYS 232. Engineering Physics II. (4-0-4); II.
Prerequisite: PHYS 231. Electromagnetism, optics, atomic and nuclear physics.
PHYS 232A. Engineering Physics II Laboratory. (0-2-1); II.
Corequisite: PHYS 232. Laboratory for PHYS 232.

PHYS 239. Cooperative Education. (1 to 8 hrs.); I, II, III.
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 270. Introduction to Scientific Computing. (3-0-3); II.
Prerequisite: ACT math subscore of 22, or "C" or better in MATH 152. An introductory computing course emphasizing fundamental computing tools and techniques, and their application to solving scientific problems. Topics include operating systems, hardware, popular and scientific software, C++ programming in the context of solving scientific problems, and electronic communication. Equates with CS 270.

PHYS 299. Selected Topics. (1 to 6 hrs.); on demand.

PHYS 324. Radio Astronomy. (3-0-3); on demand.
Prerequisite: ASTR 125 and PHYS 232. A study of astrophysically interesting phenomena utilizing the techniques of the science of radio astronomy; topics include galactic structure, radio galaxies, cosmic jets and black holes, interstellar molecules and instrumentation in radio astronomy, with a major emphasis in the methods of research in experimental astrophysics. Equates with ASTR 324/SSE 324

PHYS 332. Electricity and Magnetism. (4-0-4); II, alternate years.
Prerequisite: PHYS 232. Classical electricity and magnetism, Maxwell's equations, Lorentz force equation; electrodynamics, electrostatics, and magnetostatics; circuit theory, electromagnetic waves, and radiating systems.

PHYS 339. Cooperative Education. (1 to 8 hrs.); I, II, III.
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 340. Experimental Physics. (1-4-3); II, alternate years.
Prerequisite: PHYS 232. Selected experiments from classical and modern physics. Computer analysis and simulation.

PHYS 350. Nuclear Science. (3-2-4); II.
Prerequisite: PHYS 202. An interdisciplinary course in nuclear science and technology. Topics include nuclear and particle physics, radioactive decay processes, radiation interaction with matter, biological effects of radiation, human exposure to radiation, dose calculations, nuclear medicine, industrial and nuclear power applications, and radiation related science and society issues.

PHYS 353. Concepts of Modern Physics I. (4-0-4); I.
Prerequisite: PHYS 232. An introduction to the fundamentals of special relativity and quantum mechanics. Topics include relativistic kinematics and dynamics, particle properties of waves, wave properties of particles, atomic structure, the Schrodinger's equation, wave packets and uncertainty, barriers and wells, and the hydrogen atom.

PHYS 354. Concepts of Modern Physics II. (3-0-3); II.
Prerequisite: PHYS 353. An introduction to the fundamentals of elementary particles and the central applications pertaining to modern physics. Topics include atomic and nuclear physics, molecules, statistical physics, lasers, and solid state physics.

PHYS 361. Fundamentals of Electronics. (2-2-3); I.

PHYS 381. Computer Solutions to Engineering and Science Problems. (3-0-3); on demand.
Prerequisites: PHYS 232 and PHYS 270. Applications of computer programming to problems in engineering and physics. Problems will be selected from statics, dynamics, mechanics of materials, thermodynamics, and electricity and magnetism, with an extended problem selected from the student's major area of interest.

PHYS 391. Dynamics. (3-0-3); I, alternate years.
Prerequisite: PHYS 221 or 231. A study of motion of bodies. Kinematics and dynamics of particles and rigid bodies; work and energy; impulse and momentum. Equates with MATH 391.

PHYS 399. Selected Topics. (1-6 hrs.); on demand.

PHYS 410. Solid State Physics. (3-0-3); on demand.
Prerequisite: PHYS 353. Lattice dynamics, electrons in metals, semiconductors, and dielectric and magnetic properties of solids.

PHYS 411. Thermodynamics. (3-0-3); II.
Prerequisite: PHYS 231. First and second laws of thermodynamics, power and refrigeration cycles, statistical thermodynamics, relations among properties, and equations of state.

PHYS 412. Light and Physical Optics. (3-0-3); on demand.
Prerequisite: PHYS 232. Dualistic nature of light; interference, refraction, reflection, diffraction, polarization, laser action, and spectra.

PHYS 431. Space Plasma Physics. (3-0-3); on demand.
Prerequisite: PHYS 232. Corequisite: MATH 276 or 363. An introduction to plasma physics and its applications to space and astrophysical systems, with an emphasis on the Earth's environment in space. Topics will include the motion of charged particles in electromagnetic fields, the description of plasmas in the framework of one- and two-fluid approach, and its description in the framework of kinetic theory. Plasma equilibria, waves, and instabilities will also be discussed. Equates with SSE 431/ASTR 431.
PHYS 439. Cooperative Education
(1 to 8 hrs.); I, II, III.
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 452. Nuclear Physics.
(3-0-3); on demand.
Prerequisite: PHYS 232. Binding energies, nuclear forces, transmutation of nuclei, natural and artificial radioactivity.

PHYS 476. Special Problems.
(1 to 6 hrs.); I, II, III.
Prerequisite: consent of instructor. Topic to be approved prior to registration.

PHYS 481. Mathematics for Engineers and Scientists.
(3-0-3); on demand.
Prerequisite: MATH 276. Fourier series, ordinary and partial differential equations, special functions, and integral transforms. Equates with MATH 481.

PHYS 493. Quantum Mechanics.
(3-0-3); on demand.
Prerequisite: PHYS 353 or consent of instructor. The wave function; Hermitian operators and angular momentum; Schrödinger’s equation, barriers, wells, harmonic oscillators, and the hydrogen atom.

PHYS 499. Selected Topics.
(1 to 6 hrs.); on demand.

PHYS 499C. Senior Thesis I.
(1-2 hrs.); I, II.
Prerequisite: senior standing and by petition. Designed to give the student an introduction to research and literature in mathematics, computer science or physics. This course, combined with PHYS 499D, satisfies the capstone component for general education. This course satisfies the integrative component for general education.

PHYS 499D. Senior Thesis II.
(0-2-1); I, II.
Prerequisite: CS/MATH/PHYS 499C. Completion of the directed research project begun in CS/MATH/PHYS 499C. A formal report that includes the basic literature search and appropriate original work will be prepared in a form suitable for submission to a scientific journal. A technical oral presentation of the research will be made to the department. In addition, an oral or poster presentation at a local, state, regional, or national meeting will be required. This course, combined with CS/MATH/PHYS 499C, satisfies the capstone component for general education. This course satisfies the integrative component for general education.

PLS - Paralegal Studies Courses

PLS 200. Law and Individual Rights.
(3-0-3); I.
A critical study of civil and criminal laws relating to an individual’s legal rights and responsibilities in the context of the larger community. This course satisfies the SBS I requirement for general education.

PLS 210. Introduction to Law & Ethics.
(3-0-3); I.
A study of law and the legal system, the responsibilities and ethics of the paralegal, and the major elements of the paralegal program.

PLS 226. Law for the Layperson.
(3-0-3); I, II.
A study of practical criminal and civil law which every citizen should know; designed to provide an understanding of a person’s legal rights and responsibilities, a knowledge of everyday legal problems, and the ability to analyze, evaluate, and, in some instances, resolve simple legal disputes. This course may not be taken for Paralegal Studies credit.

PLS 321. Legal Research & Writing I.
(3-0-3); I, II.
A study of primary and secondary legal authority, the proper form of citations and techniques for searching, validating and analyzing legal authority.

PLS 325. Pretrial Practice.
(3-0-3); I.
Prerequisite: PLS 321 or consent of department chair. An overview of the study of civil litigation, concentrating on the principles of litigation, the lawyer-client relationship, ethics, court organization, jurisdiction, and introduction to the Rules of Civil Procedure and the Rules of Evidence as they pertain to the pleading and discovery stages of litigation with emphasis on drafting documents related to discovery; and studying the procedures utilized for gathering evidence and investigating cases.

PLS 332. Property Law.
(3-0-3); II.
Prerequisite: PLS 210. A study of real and personal property with an emphasis on related forms, documents, and procedures, including title examination and real estate transfers.

PLS 333. Family Law.
(3-0-3); I.
Prerequisite: PLS 210 or equivalent or consent of instructor. The main emphasis is the study of domestic law including modern divorce (marriage dissolution), annulments, antenuptial agreements, child support and custody, alimony, property division, and related tax consequences. Also studied briefly are spouse and child abuse remedies, the rights of women and children and the juvenile court.

(3-0-3); II.
A study of the law of torts with emphasis on forms, documents, and procedures related to personal injury litigation and insurance claims.

PLS 335. Contracts and the Uniform Commercial Code.
(3-0-3); I.
A practical course in simple contract law and its evolution into modern day sales law under the Uniform Commercial Code. Additionally, the course studies other aspects of the Uniform Com-
PLS 337. Corporate Law.  
(3-0-3); II. 
The business corporation is the most versatile form of business association. This course studies the law of business corporations with an emphasis on related forms and documents.

(3-0-3); II. 
Prerequisite: PLS 210. A study of the law of crimes against persons and property, defenses to prosecution and punishment, and of criminal procedure and evidence, with an emphasis on the Kentucky Penal Code and related forms and documents.

PLS 360. Paralegal Specialty Course.  
(3-0-3); on demand. 
Prerequisite: PLS 210 and consent of instructor. A practice-oriented study of specialized areas of law not examined in the core curriculum which will emphasize the use of forms and documents. A different legal specialty will customarily be chosen each time the course is offered. May be repeated once for credit.

PLS 421. Legal Research & Writing II.  
(3-0-3); II. 
Prerequisite: PLS 321. A study of the methods using legal authority to construct a written argument with an emphasis on legal writing style and drafting techniques.

PLS 425. Trial Practice.  
(3-0-3); II. 
Prerequisite: PLS 321, PLS 325, or consent of department chair. Continues the study of the techniques of civil litigation begun in PLS 325, emphasizing the Rules of Civil Procedure and the Rules of Evidence during the trial and appeal stages of civil litigation, with emphasis on drafting documents related to the trial and appeal stages of civil litigation.

PLS 436. Wills, Trusts, and Estates.  
(3-0-3); II. 
A study of the law and practice of wills, trusts, and estate administration for the paralegal with particular emphasis on forms and documents.

PLS 476. Special Problems in Paralegal Studies.  
(1 to 3 hrs.); on demand. 
Prerequisite: consent of department chair. Open only to Paralegal Studies majors. Original research project or readings in a particular subject area.

PLS 490. Paralegal Internship.  
(3-0-3); I, II, III. 
Prerequisite: consent of department chair. The development and application of paralegal skills through a practicum requiring the student to work 120 hours under the direct supervision of an attorney in a law office or other appropriate legal environment.

PLS 499C. Senior Paralegal Practice Seminar.  
(3-0-3); I. 
Prerequisites: CIS 101 or equivalent, PLS 326, and senior standing or consent of department chair. An advanced course to be taken prior to the paralegal internship. The course is a study in the use of and implementation of technology in the law office emphasizing document generation techniques, docket control and case management systems, time and billing systems and Computer Assisted Legal Research (CALR). This course satisfies the integrative component for general education.

PPOL - Public Policy Courses

PPOL 205. Conducting Public Policy Research.  
(3-0-3); I. 
This course introduces the process of designing and conducting research for informing public policy. Models and theories underlying effective public policy research are discussed. Basic skills of database creation, management, and analysis are introduced along with advanced word processing and visualization. The class also exposes students to more specific graphing, statistics, and mapping tools needed for public policy analysis.

PPOL 220. Introduction to Development Policy.  
(3-0-3); I. 
This course provides the historical context as well as the concepts, theories, and practices necessary for understanding public policy and development in communities and regions. These concepts, theories, and practices are commonly used in government, the private sector, nonprofit organizations, and academia. Three major areas of public policy and development are encompassed by the course: society and culture, nature and the environment, and planning and the economy. An interdisciplinary approach is emphasized to provide students with a foundation for understanding the social, political, and environmental contexts of development situations and their relationships to public policy.

PPOL 230. Introduction to Justice Policy.  
(3-0-3); I. 
What is justice? There are many notions of what justice might mean, its origins, and how disparities in justice might be the source of social problems, unrest, and dissatisfaction. This course is intended to help students identify, understand and apply perspectives of justice in society with a view to creating and implementing public policy.

PPOL 399. Topics in Public Policy.  
(3-0-3); II. 
This course will examine selected topics such as sustainable development, political economy of development, justice policy and practice, or other public policy areas. This course offers greater depth of treatment in these topical areas and supplements regular course offerings. It may be repeated if the subtitle indicates different content is being offered.

PPOL 400. Ethics in Public Policy.  
(3-0-3); II. 
This course is a study of ethics and ethical issues as they pertain to American public policy. Fundamental ethical questions will be examined along with several major ethical theories and professional codes of conduct. These theories will be applied to ethical dilemmas that arise in a variety of public policy arenas. Through the application of theory to practical case studies, students will acquire the ability to recognize ethical issues in public policy and think ethically using a variety of intellectual frameworks within the parameters set by government agencies and non-profit organ-
PPOL 499C. Senior Seminar in Public Policy.
(3-0-3); I, II.
This course provides a synoptic integration of the diverse field of public policy, including the range of issues raised and methods for understanding and addressing them. Students will engage in a comprehensive assessment of the field, including its foundations, history, development, and current practice. This course will deepen students’ understanding of the fundamental theoretical issues that are common across policy domains and will afford the opportunity to reflect upon the diverse epistemological approaches used by various academic disciplines in the natural sciences, humanities, and social sciences, all of which inform the development of just public policy in the service of the common good of society. This course satisfies the integrative component for general education.

PSY - Psychology Courses

PSY 154. Introduction to Psychology.
(3-0-3); I, II, III.
Course includes the application of psychological theories and principles in such major areas of psychology, including abnormal, biological, clinical, cognitive, developmental, personality, learning, sensation and perception, and social; in addition to the understanding of methods used in psychological research. This course satisfies the SBS II requirement for general education.

PSY 156. Life Span Developmental Psychology.
(3-0-3); I, II.
Prerequisite: PSY 154. Covers developmental theories, principles, and characteristics of individuals across the major developmental periods: prenatal, infancy and childhood, adolescence and adulthood.

PSY 157. Psychology of Adjustment.
(3-0-3); I, II.
Prerequisite: PSY 154. Overview of processes and adaptation and personal adjustment in family, group, and work settings. Personality theories of Erikson, White, and others applied to process of developing for the individual a sense of competence and means of resolution of crises during life cycle.

PSY 199. Workshop.
(1 to 3 hrs.); on demand.
Workshop for specifically designated task orientation in psychology. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

PSY 223. Female Brain and Behavior.
(3-0-3); on demand.
Prerequisite: PSY 154. Covers basic structural and functional differences between the female brain and the male brain. Major topics will include differences in architecture of the brain, brain neurochemistry, higher brain functions, and disorders. Equates with WST 223.

PSY 276. Independent Study.
(1 to 3 hrs.); I, II, III.
Restriction: consent required. Professional problem in psycholo-

PSY 281. Experimental Design and Analysis I.
(2-2-3); I.
Prerequisites: PSY 154 and MATH 123 or higher. An introduction to psychological research methods including experimental design, data analysis and presentation, report writing and proposal development (APA style), and statistical software applications (SPSS). Laboratory experiences are an integral part of this course.

PSY 282. Experimental Design and Analysis II.
(2-2-3); II.
Prerequisite: PSY 281. Continuation of PSY 281 with special emphasis on the design and analysis of more complex experimental designs using inferential statistics and computer software applications, and original psychological experimentation by the student. Laboratory experiences are an integral part of this course.

PSY 339. Cooperative Education.
(1 to 8 hrs.); on demand.
Restriction: consent required. Participation in supervised work experience in a professional environment.

PSY 353. Industrial Psychology.
(3-0-3); on demand.
Prerequisite: PSY 154. Applied experimental and engineering psychology. Surveys of basic engineering data with emphasis on experimental procedure, receptive and motor capacities, and their application to equipment design and other problems.

PSY 354. Introduction to Social Psychology.
(3-0-3); I, II.
Prerequisite: PSY 154. Scientific study of individual's relationship with social environment. Emphasis on attitudes, personality, prejudice, discrimination, dominance, role theory, social learning, social and interpersonal perception, and social movement.

(3-0-3); I.
Prerequisite: PSY 154. Extensive examination of the cognitive and social cognitive development of the infant and child. Both the major theories of cognitive developmental psychology and the developmental processes of perception, memory, problem solving and other cognitive skills will be examined.

PSY 358. Psychological Testing.
(3-0-3); on demand.
Prerequisite: PSY 154. General introduction to psychological testing. Topics include interest inventories, measurement and evaluation of personality, measurement of proficiency, performance, attitudes, temperament, aptitude, capacity, and intelligence through use of group assessment instruments used in psychological research, guidance, education, social research, business, and industry.

PSY 359. Applied Behavior Analysis.
(2-2-3); on demand.
Prerequisite: PSY 154. Operant learning principles that govern human behavior applied to modification of behavior in clinical setting. Course is designed to give experience in dealing with be-
havioral problems in classroom and clinical settings. Laboratory experiences are an integral part of course.

**PSY 380. Cognitive Psychology.**  
(3-0-3); I, II.  
*Prerequisite: PSY 154.* Scientific study of mental processes such as perception, attention, memory, language, and decision-making. Emphasis is on contemporary issues such as types of memory, the relationship between the brain and cognition, and computer models of information processing.

**PSY 384. Sensation & Perception.**  
(2-2-3); I.  
*Prerequisite: PSY 154.* Examination of the role of perception as an information extraction process. Includes constancies, space perception, illusions, and influences of learning and experience on development of perception. Laboratory experiences are an integral part of this course.

**PSY 389. Honors Seminar in Psychology.**  
(3-0-3); on demand.  
*Prerequisites: HON 101 and HON 102.* Study and discussion of current topics, issues, and problems in a particular area of the overall discipline. Topics will vary from semester to semester.

**PSY 390. Psychology of Personality.**  
(3-0-3); I, II.  
*Prerequisite: PSY 154.* Introduction to major approaches, methods, and findings in field of personality, including overview of basic theories, strategies, issues, and conclusions; attention to assessment and personality change.

**PSY 399. Workshop.**  
(1 to 3 hrs.); on demand.  
*Prerequisite: PSY 154.* Workshop for specifically designated task orientation in psychology. May be repeated in additional subject areas. Maximum of six semester hours may be earned under this course number.

**PSY 421. Physiological Psychology.**  
(3-0-3); I, II.  
*Prerequisite: PSY 154.* Physiological mechanisms of normal human and animal behavior. Anatomy and physiology relevant to student of sensory and motor functions, emotion, motivation, and learning.

**PSY 422. Comparative Psychology.**  
(3-0-3); on demand.  
*Prerequisite: PSY 154.* Theory and application of field and laboratory techniques used in understanding behavior of animals. Areas include: instinct, learning, motivation, sensory discrimination, heredity, and perception.

**PSY 450. Abnormal Psychology.**  
(3-0-3); II, III.  
*Prerequisite: PSY 154.* Psychology, behavior, and treatment of individuals with emotional, perceptual handicaps, and behavioral disorders; general methods used in therapy, and research in this area.

**PSY 452. Disorders of Childhood.**  
(3-0-3); on demand.  
*Prerequisites: PSY 154 and 156 or EDF 211 or HS 253.* Survey of childhood disorders, therapies, research, and practical issues involved in working with children, adolescents, and families in a clinical setting.

**PSY 456. Introduction to Clinical Psychology.**  
(3-0-3); I, II.  
*Prerequisite: PSY 154.* Survey of basic theoretical issues and research in areas of assessments and psychotherapy. Consideration of ethical, legal, and other professional problems in clinical psychology. Emphasis on clinical aspects of school psychologist’s functions in working with school age children.

**PSY 465. Drugs and Behavior.**  
(3-0-3); on demand.  
*Prerequisite: PSY 154.* An introduction to the biological and psychological principles involved in the study of psychoactive drugs. Includes discussion of drug action, drug classification, and theories of chemical dependency.

**PSY 469. Counseling Psychology.**  
(3-0-3); I.  
*Prerequisite: PSY 154.* A survey and study of the major approaches and orientations to therapeutic intervention in mental health services. Will include coverage of supportive/crisis intervention, insight/relationship oriented therapies, and group and family therapies. Students will receive exposure to theoretical literature and practical application of the various interventions.

**PSY 470. Research Problems.**  
(1 to 3 hrs.); I, II, III.  
*Restrictions: consent required.* Independent research study of professional problem. Student to discuss with faculty mentor before consent can be granted. Conferences with instructor by arrangement.

**PSY 471. Addiction Therapies.**  
(3-0-3); on demand.  
*Prerequisites: PSY 154, 421, and 465.* An introduction to the treatment of psychoactive substance use disorders and psychoactive substance-induced organic mental disorders. Includes discussion of the phases, stages, and progression of these disorders, treatment options and methods/process, maintenance procedures, and treatment outcome research findings.

**PSY 472. Practicum.**  
(3 to 6 hrs.); I, II, III.  
*Restrictions: consent required.* Practical learning experiences in school, clinical, or organizational settings under qualified supervision by a licensed/certified psychologist. Minimum of 160 hours over a minimum of eight weeks required for each three hours of credit.

**PSY 475 Selected Topics.**  
(2-2-3); I, II, III.  
*Restrictions: consent required.* Student to discuss with faculty mentor before consent can be granted. Conferences with instructor by arrangement.
PSY 477. Seminar in Developmental Research. (3-0-3); I, II.
Prerequisites: PSY 156 and 282. Intensive examination of research in contemporary developmental psychology. Emphasis on reading and evaluating current journal articles and designing research projects.

PSY 486 Motivation. (2-2-3); I, II.
Prerequisite: PSY 154. Consideration of basis of human and animal motivation in relation to other psychological processes.

PSY 489. Psychology of Learning. (3-0-3); I, II.
Prerequisite: PSY 154. Fundamental principles of learning, including acquisition, retention, forgetting, problem solving, and symbol formation; experimental studies; application of principles to practical problems in habit formation, development of skills, remembering, and logical thinking.

PSY 499C. Systems and Theories. (3-0-3); I, II.
Prerequisites: PSY 154, PSY 282, and senior standing. Intensive study of most influential historical systems of psychology including structuralism, functionalism, associationism, behaviorism, Gestalt psychology, and psychoanalysis, and a treatment of contemporary developments. This course satisfies the integrative component for general education.

RAPP - Regional Analysis and Public Policy Courses

RAPP 101. Introduction to Public Policy. (3-0-3); I, II.
This course introduces students to contemporary issues in public policy, including such areas as environmental policy, intergovernmental relations, education policy, justice policy and community and economic development. This course will introduce students to the basics of policy making at the local level; the political, social and economic history of U.S. regions, with the Appalachian region as a case study; the scientific knowledge and other expertise utilized in identifying community and regional problems, posing solutions, educating the public, and monitoring progress; the policy making process, from problem identification to policy solutions to evaluation. This course satisfies the SBS I requirement for general education.

RAPP 202. Basic Computer Techniques in Regional Analysis. (2-2-3); I, II.
The course introduces students to computer-based research techniques that are widely used by practitioners in a variety of content areas. Course content includes earth and environmental sciences. Specific course activities address water quality, natural hazards, land use, and natural resources from a regional perspective. Research techniques and tools are introduced that address planning a study, library investigations, collecting, processing and analyzing data, and dissemination results. Specifically, the basic skills of spreadsheet and database use are introduced along with the essential analytical skills of charting, statistics, and mapping. In addition, the course addresses Internet communications, methods of transmitting and receiving data, data collection and compilation, and oral/written communication of results. This course satisfies the SBS II requirement for general education.

RAPP 203. Society, Nature and Development. (3-0-3); I, II.
Prerequisite: SOC 101 (Computer Enhanced), MATH 152 and BIOL 153 or equivalent. This course introduces the concepts, theories and practices used to understand communities and regions. These concepts, theories, and practices are commonly used in government, the private sector, nonprofit organizations, and academia. Three major areas of community and regional analysis are encompassed by the course: society and culture, nature and the environment, and planning and development. Also incorporated is material on race, ethnicity, gender, and class. An interdisciplinary approach is emphasized to provide students in environmental sciences, agriculture, economics, management, law, medicine, sociology, social work, geography, and government with a foundation for understanding the social, political, and environmental contexts of situations in which they work. This course satisfies the SBS II requirement for general education.

RAPP 289. Regional Natural History. (3-0-3); I.
Characterization and identification of regional biota and the ecosystems they inhabit, including examinations of regional policies. This course satisfies the NSC I requirement for general education.

RAPP 300. Seminar in Regional Issues I. (3-0-3); I.
Prerequisite: RAPP 202. This multidisciplinary seminar teams faculty, students, resource people and citizens in discussion, research, analysis and action plans related to specific topics and current issues in regional analysis and includes a practical focus on regional economic development and public policy. Selected topics include: housing, transportation, education, water quality, land use, air quality, wood, employment, health and health care, crime/violence, poverty and others.

RAPP 350. Practicing Regional Analysis I. (2-12-3); on demand.
Prerequisite: RAPP 300. Practical experience in agency, organization, or field setting related to the student’s academic program. Students will work in settings over the full semester or summer and complete a research paper, organizational analysis, position or policy paper that integrates the intellectual world with the real world.

RAPP 376. Directed Research. (3-0-3); I, II, III.
Prerequisite: six hours of Regional Analysis and Public Policy courses or permission of the instructor. Focused research under the direction of an IRAPP faculty member.

RAPP 450. Practicing Regional Analysis II. (2-12-3); on demand.
Prerequisite: RAPP 350. Practical experience in agency, organization, or field setting related to students’ academic program. Students will work in settings and conduct research or execute projects that will be further developed as part of the requirements in RAPP 490.
RAPP 490. Seminar in Regional Issues II. (3-0-3); II. 
*Prerequisites:* RAPP 350 and senior standing. This seminar will focus on selected current issues in regional analysis and will include a practical focus on their effect on regional economic development and regional policy. Persons from this region (citizens, policymakers, and activists) will be invited to bring a firsthand view of these issues.

RCP - Respiratory Care Courses

RCP 110. Cardiopulmonary Anatomy & Physiology. (3 hrs.).
The anatomy and physiology of the respiratory and the circulatory systems are explored in detail. Emphasis is placed on the interaction of systems in gas exchange and acid-base balance. The structure and function of the chest cage, mechanics of breathing and control of respiration are also included.

RCP 120. Theory and Principles of Respiratory Care. (4 hrs.).
*Prerequisites:* BIO 137 and MT 110, MT 145, MT 150, or equivalent with a grade of "C" or better. Principles and techniques of therapeutic procedures used in respiratory care are covered. Included are: the safe handling and administration of medical gases; use of humidity and aerosol therapy; providing lung inflation and bronchial hygiene therapy; and airway care. Presents indications, contraindications, and physiologic effect of each therapy with emphasis on safety and appropriateness of care.

RCP 125. Cardiopulmonary Evaluation. (4 hrs.).
Cardiopulmonary assessment is addressed. Topics include invasive and noninvasive blood gas analysis and interpretation, pulmonary function studies, basic laboratory data interpretation, electrocardiography, and assessment of neck and chest imaging.

RCP 130. Pharmacology. (3 hrs.).
A detailed study of the pharmacological agents used in the practice of respiratory care. Common agents of the various drug classifications used in the treatment of patients with cardiovascular or pulmonary impairment are covered. Calculations commonly used in preparing and administering drugs are presented emphasizing the need for accuracy.

RCP 150. Clinical Practice I. (2 hrs.).
Students will observe and assist with chest physical assessment, medical gas administration, humidity and aerosol therapy and bronchial hygiene in the assigned setting.

RCP 175. Clinical Practice II. (2 hrs.).
Students will participate in the health care team while practicing techniques of respiratory care including airway management and bronchial hygiene in the assigned setting.

RCP 180. Ventilatory Support. (3 hrs.).
The technological and physiological aspects of mechanical ventilation including the theory of operation, classification, and management of the patient ventilatory system are offered.

RCP 190. Advanced Ventilatory Support. (2 hrs.).
Advanced concepts in ventilatory support including monitoring and management of the patient ventilator system are addressed.

RCP 200. Clinical Practice III. (3 hrs.).
Students will practice adult mechanical ventilation procedures and airway management in the critical care setting while continuing to perform other respiratory care skills.

RCP 204. Emergency & Special Procedures I. (3 hrs.).
*Prerequisite:* RCP 130 and BIO 139 with a "C" or better. Prepare students to participate in advanced emergency life support and special procedures.

RCP 210. Cardiopulmonary Pathophysiology. (2 hrs.).
The etiology, diagnosis, clinical manifestations and management of cardiopulmonary disorders as related to respiratory care are addressed.

RCP 212. Neonatal/Pediatric Respiratory Care. (3 hrs.).
Special needs of neonatal and pediatric patients are addressed. Fetal cardiopulmonary development and changes at birth are covered. Equipment, procedures and methods used in the care and evaluation of neonatal and pediatric patients are also covered. Cardiopulmonary conditions and diseases particular to neonates are discussed.

RCP 214. Advanced Diagnostic Procedures. (3 hrs.).
*Prerequisite:* BIO 139 with a grade of "C" or better. Prepares students to assist physician in advanced diagnostic and therapeutic procedures.

RCP 225. Clinical Practice IV. (3 hrs.).
Students will observe and practice advanced cardiopulmonary evaluation techniques while improving efficiency in the ventilatory management of adult patients. Students may also practice pediatric and neonatal mechanical ventilation techniques in the assigned setting.

RCP 228. Preventive & Long-Term Respiratory Care. (2 hrs.).
*Prerequisite:* RCP 100 with a grade of "C" or better. Discuss an overview of techniques for assessing client psychosocial and physical needs as well as strategies for client education in the prevention and management of cardiopulmonary diseases and disabilities.

RCP 250. Clinical Practice V. (3 hrs.).
Emphasis is on preparing the student to participate in effective and efficient planning, managing and delivering respiratory care to diverse client population in various settings.
RCP 299. Selected Topics in Respiratory Care (Clinic). (1 to 4 hrs.) A special project or experience in Respiratory Care will be selected to enhance core material in the Respiratory Care Program. It provides the student an opportunity for independent study and specialized instruction as approved by the instructor.

REAL - Real Estate Courses

REAL 105. Principles of Real Estate. (3-0-3); I, II. A general introduction to real estate as a business and profession. Acquaints the student with a wide range of subjects necessary to the practice of real estate, including license law, ethics, listing and purchase agreements, brokerage, deeds, financing, appraisal, mortgages, and property management.

REAL 200. Real and Personal Property Auctions. (3-0-3); on demand. Prerequisite: REAL 105. Introduction to the current theory and practice of the marketing of real estate and personal property through the auction process. State laws, regulations, and ethical standards and practices which govern the profession will be covered in detail.

REAL 303. Real Estate Market Analysis. (3-0-3); on demand. Prerequisite: REAL 320. Designed to develop skills in analysis of real estate markets and to implement the results of this analysis in real estate sales and marketing management. Students should become proficient in the use of quantitative tools and interpretation of data output in real estate fields.

REAL 309. Real Estate Land Planning and Development. (3-0-3); on demand. Prerequisite: REAL 105. A comprehensive course on the specialized field of land planning and development, emphasizing the field of home construction. Neighborhood analysis, house design, mechanical systems, and blueprint reading are stressed. Provides important background for developers, appraisers, brokers, and property managers.

REAL 310. Real Estate Law. (3-0-3); on demand. Prerequisite: REAL 105. Overview of real estate law, focusing on legal fundamentals including contracts, concepts of title, title examination and licensing law.

REAL 320. Real Estate Marketing. (3-0-3); on demand. Prerequisite: REAL 105. Designed to help real estate professionals with listing, prospecting, showing, negotiating, and closing. Furthermore, qualifying them, organizing, and promotional package design will be discussed. Marketing skill development is emphasized.

REAL 330. Real Estate Property Management. (3-0-3); on demand. Prerequisite: REAL 105. Introduction to basic organization, administrative operation, and management of residential and commercial projects of various sizes. The financial considerations, staffing, training, and evaluation of personnel, sales methods, and promotional techniques in property management.

REAL 331. Real Estate Finance & Investment. (3-0-3); on demand. Prerequisite: REAL 105. Introduction to the mechanisms of real estate finance, sources of funds, principles of mortgage risk analysis, governmental agency roles, and cash flows. Theories and practices of real estate investments.

REAL 339. Cooperative Education III. (1 to 8 hrs.); on demand. Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a junior level status. Maximum of three hours of cooperative education credit (REAL 339/439) available for option credit.

REAL 399. Selected Workshop Topics. (1 to 4 hrs.); on demand. Workshops on various real estate topics will be presented periodically to supplement the basic course offerings in real estate. Credit toward degree programs must be approved by the student’s advisor.

REAL 400. Real Estate Brokerage. (3-0-3); on demand. Prerequisite: REAL 105. An examination of the establishment and operation of a real estate broker’s office; concentrating on the unique problems of staff recruitment and training, sales activities, marketing practices and policies, budget establishment, analysis and control, data handling, personnel policy, and professional ethics in such an agency.

REAL 439. Cooperative Education IV. (1 to 8 hrs.); on demand. Work experience with an in-depth exposure representative of the student’s academic level and experience analogous to a senior level course. Maximum of three hours of cooperative education credit (REAL 339/439) available for option credit.

REAL 476. Special Problems in Real Estate. (1 to 3 hrs.); on demand. Prerequisites: senior standing and consent of department chair. Self-directed independent study on a specific problem, based on written proposal and justification submitted by student prior to registration. Each request will be considered on its own merit in relation to the special needs, interest, and abilities of the student.

REL - Religion Courses

NOTE: Credit in philosophy is not given for any of the courses in religion.

REL 221. World Religions I. (3-0-3); on demand. Prerequisite: PHIL 200. Origin, development, assumptions, values, beliefs, practices, great leaders and principal events of Judaism, Christianity, Islam and Zoroastrianism. Equates with IST 221.

REL 222. World Religions II. (3-0-3); on demand.
REL 321. Early and Medieval Christian Thought. (3-0-3); on demand.  
Prerequisite: PHIL 200. Ideas concerning the nature of God, Jesus, the church, man, sin, salvation, the good life and other issues presented by Jesus, Paul, John and the early and medieval church fathers or leaders to the beginning of the Reformation.

REL 322. Modern Christian Thought (1500 to 1900). (3-0-3); on demand.  
Prerequisites: REL 321 and/or PHIL 200 is recommended. Ideas concerning the nature of God, Jesus, the church, man, sin, salvation, the good life, and other issues presented to theologians and religious leaders from the beginning of the Reformation to the 20th century.

REL 323. Twentieth Century Christian Thought. (3-0-3); on demand.  
Prerequisite: REL 322 or PHIL 200 or consent of instructor. Ideas concerning the nature of God, Jesus, the church, man, sin, salvation, the good life, and other issues presented by major 20th century theologians such as Barth, Bultmann, Tillich, Niebuhr, Wie- man, Hartshorne, A.T. Robertson, Karl Rahner, Karl Adam, Thomas Altizer, and Dietrich Bonhoeffer.

REL 476. Special Problems. (1 to 3 hrs.); on demand.  
Prerequisite: 12 hours in religious studies or consent of depart- ment chair. The student selects an approved topic in religion on which to do a directed study.

RSCI - Radiologic Sciences Courses

RSCI 110. Introduction to Radiologic Sciences. (1-0-1); I, II.  
This course is designated to introduce selected concepts and theories upon which the profession of radiologic sciences is based. This course is open to non-radiologic science majors and is a requirement for admission into the Radiologic Sciences Program. One hour of didactic experience per week.

RSCI 200. Patient Care. (2-2-3); I.  
Corequisites: RSCI 206 and 210. Restriction: admission to associate degree radiologic science program. A continuation of RSCI 206 which studies radiographic anatomy, positioning, and image evaluation with emphasis on the radiographer’s role and function in the performance of such imaging procedures as chest, bony thorax, abdomen, upper and lower extremity, and selected contrast procedures. Four hours of didactic and two hours of laboratory experience per week.

RSCI 206. Radiographic Anatomy, Positioning, and Imaging Production I. (4-2-5); I.  
Corequisites: RSCI 200 and 210. Restriction: admission to associate degree radiologic science program. A study of radiographic anatomy, positioning, and image evaluation. Emphasis is on the radiographer’s role and function in the performance of such imaging procedures as chest, bony thorax, abdomen, upper and lower extremity, and selected contrast procedures. Four hours of didactic and two hours of laboratory experience per week.

RSCI 210. Radiographic Equipment and Imaging I. (2-2-3); I.  
Corequisites: RSCI 200 and 206. Restriction: admission to associate degree radiologic science program. An introductory study of radiographic equipment and imaging, with emphasis on the role and function of the radiographer in image formation, radiation protection, and safety. Two hours of didactic and two hours of laboratory experience per week.

RSCI 310. Radiographic Anatomy, Positioning, and Image Production II. (3-2-4); III.  
Corequisites: RSCI 206 and 330. Restriction: admission to associate degree radiologic science program. A continuation of RSCI 206 which studies radiographic anatomy, positioning, and image evaluation with emphasis on the radiographer’s role and function in the performance of imaging procedures such as vertebral column, hip and pelvis, cranium, facial bones, and paranasal sinuses. Three hours of didactic and two hours of laboratory experiences per week.

RSCI 320. Radiography Clinical Internship II. (0-40-10); II.  
Corequisite: RSCI 310. Corequisite: RSCI 320. Restriction: admission to associate degree radiologic science program. Clinical experience in an affiliated health care agency’s radiology department, designated to introduce the student to the radiographer’s role and function in the practice of radiography. The student will be applying concepts and skills learned in previous RSCI courses. Emphasis is on performance of imaging procedures such as chest, bony thorax, abdomen, upper and lower extremity, and selected contrast procedures. Forty hours per week in a health care agency’s radiology department.

RSCI 330. Imaging Pathology. (2-0-2); II.  
Corequisites: RSCI 200, 206 and 210. Restriction: RSCI 230. Restriction: admission to associate degree radiologic science program. A study of radiographic anatomy, positioning, and image evaluation. Emphasis is on the radiographer’s role and function in the performance of such imaging procedures as chest, bony thorax, abdomen, upper and lower extremity, and selected contrast procedures. Four hours of didactic and two hours of laboratory experience per week.

RSCI 330. Imaging Pathology. (2-0-2); II.  
gram. A study of pathological imaging to include the cardiovascular, genitourinary, digestive and accessory organs, respiratory, nervous and musculoskeletal systems. This course will investigate the etiology, signs and systems and the primary methods of diagnosis. A major emphasis is placed on radiologic visualization of pathological conditions. Two hours of didactic experience per week.

**RSCI 335. Radiation Biology and Protection.**
*(2-0-2) II.*
Prerequisites: RSCI 300 and 320. Corequisites: RSCI 340, 346 and 350. Restriction: admission to associate degree radiologic science program. A study of the effects of radiation on the cells, tissues, organs, and the entire human body at all stages of life span. The emphasis is on radiation protection procedures, and methods of monitoring radiation exposure. The role and function of the radiologic science technologist is discussed in regards to legal responsibility for radiation protection of the patients, other health care personnel, and the public. Two hours of didactic experience per week.

**RSCI 340. Radiographic Equipment and Imaging II.**
*(2-2-3); II.*
Prerequisites: RSCI 300 and 320. Corequisites: RSCI 335, 346 and 350. Restriction: admission to associate degree radiologic science program. An advanced study of radiographic film processing and image formation with an emphasis on the role and function of the radiographer in such areas as quality assurance, fluoroscopic imaging, digital imaging and tomography. Two hours of didactic and two hours of laboratory experience per week.

**RSCI 346. Radiation Physics and Electronics.**
*(2-0-2); II.*
Prerequisites: RSCI 300 and 320. Corequisites: RSCI 335, 340 and 350. Restriction: admission to associate degree radiologic science program. The study of radiation physics and electronics with emphasis on concepts and principles as related to the role and function of the radiographer. Two hours of didactic experience per week.

**RSCI 350. Seminar in Radiography.**
*(2-0-2); II.*
Prerequisites: RSCI 300 and 320. Corequisites: RSCI 335, 340 and 346. Restriction: admission to associate degree radiologic science program. A course designed to assess the student’s knowledge and application of the radiography practice. Based on assessment results, the faculty will facilitate review and learning experiences to assist the student in meeting identified learning needs. Two hours of didactic per week.

**RUS - Russian Courses**

**RUS 101. Beginning Russian I.**
*(3-0-3); on demand.*
An introduction to Russian grammar beginning with the learning of the Cyrillic alphabet and progressing through a brief introduction of conjugation of verb forms and declension of adjectives and nouns.

**RUS 102. Beginning Russian II.**
*(3-0-3); on demand.*

**Prerequisite: RUS 101 or one year of high school Russian.** A continuation of RUS 101. An analysis of Russian grammar with emphasis on writing and speaking.

**RUS 201. Intermediate Russian I.**
*(3-0-3); on demand.*
*Prerequisite: RUS 102.* A continuation of Russian grammar with emphasis on vocabulary building and language structure. Russian lecture and elementary translation exercises are introduced in this course.

**RUS 202. Intermediate Russian II.**
*(3-0-3); on demand.*
*Prerequisite: RUS 201.* A continuation of RUS 201 with additional emphasis on Russian literature, translation, conversation, and writing.

**RUS 301. Readings in Russian Literature.**
*(3-0-3); on demand.*
*Prerequisite: RUS 202.* Directed study in Russian literature. The short story, poetry, prose, and essays. Review of Russian grammar as necessary. Oral practice.

**RUS 302. Advanced Readings in Russian Literature.**
*(3-0-3); on demand.*
*Prerequisite: RUS 301.* Readings in Russian from Lermontov, Turgenev, Tolstoy, Gogol, Dostoyevski, and others. Assigned readings on Russian culture and history. Review of Russian grammar as necessary.

**SCI - Science Courses**

**SCI 103. Introduction to Physical Sciences.**
*(3-0-3); I, II, III.*
An interdisciplinary approach to the study of the physical sciences. Incorporates measurement, energy, states of matter, and the nature and process of science as they relate to the disciplines of physics, chemistry, astronomy, and the earth sciences.

**SCI 104. Modern Issues and Problems in the Physical Sciences.**
*(3-0-3); I, II, III.*
This course offers an interdisciplinary approach to study of the physical sciences. It emphasizes decision-making based on the interpretation of data and scientific arguments. The course incorporates the study of scientific principles and concepts needed to understand current issues and problems related to modern science. This course satisfies the NSC II requirement for general education.

**SCI 111. Inquiry Physical Science for Elementary Teachers.**
*(1-4-3); I, II.*
Preservice elementary teachers will learn the essential science concepts established by the Kentucky core content for Science, which includes topics in areas of properties of matter, force and motion, heat, light and optics, electricity and magnetism, and sound. Students will learn these science concepts through a process of direct observation of physical phenomena, making sense of those observations through inference and reason and in collaboration with fellow students and instructors. Not acceptable
(1-4-3); I, II.
Preservice elementary teachers will learn the essential science concepts established by the Kentucky Core Content for Science, which includes topics in areas of geology (rocks, minerals, soils, volcanoes, earthquakes, structure of the earth, etc.), weather (sun as the source of energy, temperature, pressure, seasonal weather patterns and weather prediction, etc.), and astronomy (sun-earth-moon system, solar systems, stars, etc.). Students will learn these science concepts through a process of direct observation of physical phenomena, making sense of those observations through inference and reason and in collaboration with fellow students and instructors. Not acceptable for majors or minors in the Earth and Space sciences.

SCI 123. Concepts and Experiences in Energy.
(3-0-3); I.
An interdisciplinary approach to the study of energy. Incorporates experiences and concepts from motion, heat, light, magnetism, electricity, radioactivity, and sound waves. Equates with IET 123, PHYS 123, and SSE 123. This interdisciplinary course satisfies the NSC II requirement for general education.

SCI 199. Selected Topics.
(1 to 6 hrs.); on demand.

SCI 299. Selected Topics.
(1 to 6 hrs.); on demand.

SCI 391. Teaching Science in the Middle Grades.
(2-2-3); II.
Prerequisite: admission to the TEP and completion of BIOL 110, SCI 111, and SCI 112. Students are introduced to learning theories using the lens of teaching middle school science. Lesson development, backwards design, biological safety, laboratory design, the role of science in society, national standards for instruction of science, curriculum design using national standards, using large scale data sets, and science education research are the major foci of this course. Fifteen hours of level III field experience in a science classroom are required.

(2-2-3); I.
Prerequisites: admission to TEP and completion of at least 20 hours in Physical Science. Corequisite: SCI 403. Methods course for students who desire to become teachers of middle school science and secondary school biology, physical science, or mathematics. The course provides integrated and content specific clinical experiences designed to prepare students for student teaching their subsequent roles as classroom teachers. Equates with BIOL 402 and MATH 402.

SCI 403. Integrated Biology, Mathematics and Science Field Experiences in Teaching.
(1-4-3); I.
Prerequisites: admission to TEP and completion of at least 20 hours in Physical Science. Corequisite: SCI 402. Course provides structured field experiences for students who desire to become teachers of secondary school biology, mathematics, or physical science. This course provides guided field experiences to acclimate the student into the culture of teaching. Equates with BIOL 403 and MATH 403.

SCI 476. Special Problems.
(1 to 6 hrs.); I, II, III.
Prerequisite: consent of instructor. Topic to be approved prior to registration. Credit available in the sciences and mathematics.

(2-2-3); I, II.
Prerequisites: BIOL 110, SCI 111, SCI 112 and Math 232. Corequisite: EDEE 321 and EDUC 482. Restriction: admission to TEP. This course focuses on the development of competencies in materials and methods for teaching science to elementary children. Emphasis is placed on writing curriculum, learning the elementary science theory base, questioning strategies, best practices, science process skills, cooperative learning, technology, and assessment. Fifteen hours field experiences are an integral part of this course.

SCI 491. Science for the Middle School Teacher.
(2-2-3); I, II.
Prerequisite: student should have completed the minimum general education in science and mathematics and be admitted to TEP. A study of pedagogy, science content, and techniques applicable to the teaching of science to middle school or junior high children.

SOC - Sociology Courses

SOC 101. Introduction to Sociology.
(3-0-3); I, II, III.
This course explores the nature and dynamics of the human society. Basic concepts include: culture, groups, personality, social institutions, social processes, and major social forces. This course satisfies the SBS II requirement for general education.

(3-0-3); I, II, III.
An introduction to current social problems in America as well as sociological approaches to understanding and ameliorating these problems. This course will introduce students to sociological perspectives on social problems and provide a survey of current social problems affecting America, including poverty, class and economic inequality, racism, prejudice and discrimination, and gender and sexuality. This course satisfies the SBS I requirement for general education.

SOC 210. The Sociology of Deviance.
(3-0-3); I.
Prerequisite: SOC 101. This course is designed to introduce the student to the sociological perspective with respect to the definition, courses, and social consequences of deviance. Equates with CRIM 210.

SOC 273. Introduction to Women’s Studies.
(3-0-3); I, II.
Prerequisite: completion of the nine-hour general education re-
requirement in English and literature. A survey course designed to develop students' awareness of women's literature, poetry, contributions to science, and history, as well as an introduction to feminist theory. Women scholars of all nations and races will be highlighted.

**SOC 300. Social Stratification.**
(3-0-3); I, II, III.
Prerequisite: SOC 101. This course provides a foundation for understanding social inequality and the structured nature of privilege and disadvantages in society on the basis of class. Theoretical perspectives will review systematic stratification processes informed by class, race, and gender and their intersection. Equates with WST 397.

**SOC 302. Population Dynamics.**
(3-0-3); II.
Prerequisite: three hours sociology general education. This course examines the U.S. population, social and economic characteristics, migration, mortality, and fertility trends, influence of social factors on population processes, basic techniques of population analysis, survey of population theories, data on international migration.

**SOC 304. Social Change.**
(3-0-3); on demand.
Prerequisite: three hours sociology general education. This course examines change theories from early to contemporary scholars. Antecedents and effects of change; function, structure, and ramifications of change; normality of change in modernization; social evolution contrasted with social revolution.

**SOC 305. Cultural Anthropology.**
(3-0-3); I, II.
Prerequisite: BIOL 105 and SOC 101. Students study literate and nonliterate cultures using the ethnographic approach. Universal aspects of human experience, including the family, economic, political and religious systems examined in cross-cultural perspective are explained. Equates with WST 305 and IST 305.

**SOC 306. Juvenile Delinquency.**
(3-0-3); I, II.
Prerequisite: three hours sociology general education. This course examines the extent, ecological distribution, and theories of delinquency in contemporary American society, including a critical examination of trends and methods of treatment of delinquency. Equates with CRIM 306 and SWK 306.

**SOC 312. Sociology of Sports.**
(3-0-3); on demand.
Prerequisite: three hours sociology general education. Students explore the role of sports and games in the shaping and maintaining of values in the American culture. An examination of sport as expressed in aggression displacement, human welfare, patriotism, religion, group cohesion, sex, competition, and leisure.

**SOC 315. White Collar Crime.**
(3-0-3); I.
This course provides students with a variety of theoretical explanations and examples of corporate and organizational crime as well as crime committed by individuals in the workplace. Equates with CRIM 315.

**SOC 316. Global Crime and Terrorism.**
(3-0-3); I.
Students are introduced to international crime and terrorism in the 19th, 20th and 21st centuries through study of government-organized Armenian Genocide, the Holocaust and the Nuremberg Tribunal, and the initiation of human rights laws following the end of World War II. Students are introduced to the study and structure of international terrorism that has emanated from the Neo-Salafi and Wahhabi ideology of Radical Muslims beginning in the 20th century after the state of Israel was formed. Other types of organized crime that are discussed will include the following: corruption, drug trafficking, weapons trafficking, and human trafficking. The new International Criminal Court is introduced to students as well as international civil cases involving human rights violations. Equates with CRIM 316.

**SOC 317. Police Culture.**
(3-0-3); I.
This course provides detailed information to students about the paramilitary structure of the law enforcement agencies. Students learn about the history of policing, the code of silence, police brutality, corruption, and the history of police commissions. Students gain an understanding of the bureaucratic, organizational and political pressures that exist within and outside these organizations. Students develop a better understanding of the Bill of Rights and how that affects police work as well as Supreme Court cases and decisions that have impacted law enforcement practices. Equates with CRIM 317.

**SOC 323. Urban Sociology.**
(3-0-3); on demand.
Prerequisite: three hours sociology general education. This course focuses on the rise of modern cities; theoretical explanations of urbanization; and the analysis of modern urban problems.

**SOC 330. Applied Medical Sociology.**
(3-0-3); II.
Prerequisite: three hours sociology general education. This course examines the social, cultural, and psychological factors which influence health behaviors; an overview of health care delivery systems and policies; and an analysis of the role of social workers and other health professionals. Equates with SWK 330.

**SOC 333. Sociology of Gender Violence: Prospectives on Women and Intimate Partner Violence.**
(3-0-3); II.
Prerequisite: SOC 101, SOC 203 or WST 273. This course offers social science and experiential exposure to the controversies, theories, patterns, policies, and treatment unique to women's experiences with date, acquaintance, and spousal violence. Focus also is given to marginalized groups, including women of low income, women of color, and women in same-sex relationships. Equates with WST 333, SWK 334 and CRIM 333.

**SOC 335. The Family.**
(3-0-3); I.
This course provides students with information about family interpersonal and social structural dynamics in the multiculturally diverse U.S. society of the 21st century. The course increases students' awareness about the ways in which other social institutions such as the economy, religion, and education can either negatively or positively influence family structure and function. Equates
SOC 350. The Human Experience of Sex and Gender. 
(3-0-3); I, II.
Prerequisite: three hours sociology general education. This course focuses on meanings attached to sex and gender, theoretical explanations of those meanings, the institutions which influence perceptions and behaviors, and the impact of social definitions and practices on individuals, male and female. Equates with WST 335.

SOC 354. The Individual and Society. 
(3-0-3); I, II, III.
This course explores the influence of group processes on individual behavior. Topics covered include personality formation and change; small group behavior and leadership patterns.

(3-0-3); II.
Prerequisite: SOC 350 or WST 273. This course will explore current theoretical debates and empirical studies on the global sex industry. Broad topics this course will cover include the feminist sex wars, stripping, pornography, prostitution and sexual trafficking. Equates with WST/CRIM 363.

SOC 370. Rural Sociology. 
(3-0-3); I.
This course focuses on the cultural and social organizations of rural and urban societies with emphasis on the impact of economic changes and population movements.

SOC 374. American Minority Relations. 
(3-0-3); I, III.
Prerequisite: three hours sociology general education. This course examines the various processes of social and cultural contact between peoples; theories dealing with the sources of prejudice and discrimination; basic processes of intergroup relations; the reactions of minorities to their disadvantaged status; and means by which prejudice and discrimination may be combated. Equates with WST 374.

SOC 376. Industrial Sociology. 
(3-0-3); on demand.
Students explore moderns industrialization as social behavior. Social conditions in the rise of industrialism and effects on the worker; collective bargaining and industrial conflict; the industrial community, social classes, and the industrial order.

SOC 388. Sociology of Punishment. 
(3-0-3); II.
Prerequisite: CRIM/SOC 210. This course provides the student with a background knowledge of the development of ideas and actions taken against those people who have been the objects of society's punishment. Equates with CRIM 388.

SOC 399. Selected Topics. 
(1 to 3 hrs.); on demand.
Prerequisite: three hours sociology general education. Unique topics and learning experiences that supplement regular course offering. May be repeated in additional subject areas.

SOC 401. Criminology. 
(3-0-3); on demand.
Prerequisite: CRIM/SOC 210 and three additional hours of CRIM. This course provides a thorough examination of criminological theories. Students are provided with explanations of the causes of crime, as well as the methods of effective treatment and prevention of crime. Equates with CRIM 401.

SOC 405. Sociological Theory. 
(3-0-3); I, II, III.
Prerequisites: three hours sociology general education. This course provides an introduction to basic theoretical approaches to the study of society and a survey of contributions to the field by major theorists.

SOC 416. Family Dynamics. 
(3-0-3); II.
This course provides an intensive analysis of the family in its social context. Emphasis is placed upon social interaction within the family, socioeconomic and sociocultural factors which bear influence upon it, and the relationship of the family to the total social system.

SOC 426. The Community. 
(3-0-3); I.
This course examines the general character of community relations in society, the structure and function of the community as a social system, the processes of balancing community needs and resources, and planned and unplanned social change.

SOC 441. Gerontology. 
(3-0-3); II.
Prerequisite: department chair approval is required. This course offers an analysis of aging designed to provide the student with a knowledge of the social factors involved in the aging process as well as the effects of social, political, and economic conditions on the welfare of the elderly. Equates with SWK 441.

SOC 445. Death and Dying. 
(3-0-3); I.
Students analyze death and dying as social processes and problems; strategies for working with dying persons. Equates with SWK 445.

SOC 439. Cooperative Education. 
(1 to 8 hrs.); I, II, III.
Prerequisite: department chair approval is required. This course requires participation in supervised work experience in a professional environment.

SOC 450. Research Methodology. 
(3-0-3); I, II, III.
Prerequisites: three hours sociology general education and six additional hours of CRIM/SOC or consent of instructor. This course focuses on the fundamental assumptions underlying sociological research; some practical experience in research design, data collection, techniques, and data analysis. Equates with CRIM 450.

SOC 451. Social Science Data Analysis. 
(3-0-3); I, II.
Prerequisite: SOC 450 or consent of instructor. This course deals with the logic of data preparation and computer assisted analysis.
Appropriate methods of evaluating and applying standard social science data analysis techniques are discussed and experience in utilizing these methods is provided. In addition, the course covers the basic skills required to evaluate and write research reports. Equates with SWK 451.

**SOC 455. Qualitative Research for the Social Sciences.** *(3-0-3); on demand.*
Prerequisite: SOC 450. This course is designed to introduce students to the methods and issues of qualitative social science research. Topics covered include the theory-method link, qualitative research design, qualitative techniques of field research (observation, in-depth interviewing, and document study), case studies and content analysis, and ethical issues.

**SOC 459. Appalachian Culture.** *(3-0-3); I, II.*
In this course, students study the Appalachian culture in juxtaposition to concept of cultural dynamics. Analysis of the relationship between culture, society and personality in Appalachia.

**SOC 460. Senior Seminar.** *(3-0-3); II.*
This course is required for all sociology majors (not required for those majoring in sociology with an emphasis in criminology).

**SOC 461. Sociology of the Law.** *(3-0-3); on demand.*
This course provides a clear understanding of the manner in which laws are formed to protect certain groups and marginalize others who are often perceived as threatening. Deconstruct specific laws by analyzing the formation of criminal law from its inception stages of development in American society. Equates with CRIM 461.

**SOC 465. Environmental Sociology.** *(3-0-3); II.*
This course introduces students to the subfield of sociology examining current environmental issues and conflicts and various theoretical perspectives used to understand them and formulate solutions. The role of grassroots organizations is also reviewed. Equates with CRIM 465.

**SOC 476. Special Problems.** *(1 to 3 hrs.); I, II, III.*
Prerequisites: three hours sociology general education and nine additional hours of CRIM/SOC or consent of instructor. Students arrange with the department to study some particular aspect of the field of sociology.

**SPA - Spanish Courses**

**SPA 101. Spanish Language and Culture I.** *(3-0-3); I, II.*
Communicating in Spanish through the basic skills of listening, speaking, reading, and writing. The course also includes the appreciation and understanding of the Spanish and Latin American culture. This course satisfies the HUM II requirement for general education.

**SPA 102. Spanish Language and Culture II.** *(3-0-3); I, II.*
Prerequisite: SPA 101. Continued study of listening, speaking, reading, and writing basic Spanish with emphasis on the appreciation of the culture of Latin America and other Hispanic cultures.

**SPA 201. Intermediate Spanish I.** *(3-0-3); I, II.*
Prerequisite: SPA 102. Reading of moderately difficult Spanish texts; thorough review of minimum essentials of Spanish grammar; conversational practice.

**SPA 202. Intermediate Spanish II.** *(3-0-3); II.*
Prerequisite: SPA 201. A continuation of SPA 201. Reading of more difficult texts.

**SPA 208. Spanish Phonetics and Pronunciation.** *(3-0-3); I or II.*
Prerequisite: SPA 101 or 102. A contrastive study of the phonetic systems of English and Spanish, with emphasis on corrective exercises in Spanish pronunciation. Includes practice with tapes and transcriptions from the international phonetics alphabet.

**SPA 210. Spanish for Business Communication I.** *(3-0-3); I, II.*
Prerequisite: SPA 102. Introduction to the world of Hispanic business and commerce and to cultural aspects of problems related to the conduct of international business. Emphasis on business terminology and vocabulary, business etiquette, and bilingual business concepts.

**SPA 211. Spanish for Business Communication II.** *(3-0-3); I, II.*
Prerequisite: SPA 210. Emphasis on translation of business documents, and oral practice with business communication and interviews. Discussion of business news, advertisements, etc., and study of business documents. Appropriate practice in each area through writing and revising letters, documents and exercises.

**SPA 300. Grammar and Composition.** *(3-0-3); I.*

**SPA 301. Survey of Peninsular Spanish Literature from 1700.** *(3-0-3); on demand.*
Prerequisite: SPA 202. A survey of Spanish peninsular literature from 1700 to the present with readings from the most significant works in each literary period. Lectures, oral discussions, reports.

**SPA 302. Survey of Spanish American Literature from Colonial Times to 1880.** *(3-0-3); on demand.*
Prerequisite: SPA 202. A survey of Spanish American literature
from colonial times to 1880 with readings from the most significant works in each literary period. Lectures, oral discussions, reports.

**SPA 304. Spanish Culture and Civilization.**
(3-0-3); on demand.

**SPA 305. Conversation.**
(3-0-3); on demand.
Prerequisite: SPA 202. Conversation on daily subjects of current interest pertaining to the Hispanic world; acquisition of new vocabulary through reading of current material and usage in oral work.

**SPA 306. Latin American Culture and Civilization.**
(3-0-3); on demand.
Prerequisite: SPA 202. Study of the architecture, art, geography, history, literature, music, customs, current events, and ways of life on the Latin American world. Equates with IST 341.

**SPA 309. Explorations in Hispanic Cinema Analysis.**
(3-0-3); on demand.
Prerequisite: SPA 202. Viewing, exploration, and analysis of Hispanic films. Study of film trends and issues. Viewer’s guide to film discussion and review. May be taken more than once for credit.

**SPA 399. Special Courses.**
(1 to 3 hrs.); on demand.
These courses are usually specialized offerings in Spanish for undergraduate students. The purpose of these courses is to enhance the existing Spanish program.

**SPA 401. Masterpieces of Spanish Literature.**
(3-0-3); on demand.
Prerequisite: SPA 300. Reading, analysis, and discussion of literary masterpieces in Spanish. Emphasis on the Middle Ages and the Golden Age.

**SPA 402. Masterpieces of Spanish American Literature.**
(3-0-3); on demand.
Prerequisite: SPA 300. Reading, analysis, and discussion of literary masterpieces in Spanish. Emphasis on modernism and contemporary literature.

**SPA 403. Spanish Stylistics.**
(3-0-3); on demand.
Prerequisite: SPA 300. Reading and analysis of different writing styles. Study of Spanish rhetorical devices. Translations and compositions in Spanish.

**SPA 404. Advanced Spanish Grammar.**
(3-0-3); on demand.
Prerequisite: SPA 300. Grammatical analyses of the structure of Spanish and practice with a wide range of exercises.

**SPA 405. Linguistics and Language Teaching.**
(6 hrs.); on demand.
Prerequisite: must be admitted to the Teacher Education Program. The application of current linguistic theories to the methodology of teaching French and Spanish; microteaching practice and field experiences in the four skills, grammar, and culture. This course includes 30 clock hours of field experience (grades P-12). Equates with FRN 405.

**SPA 432. Contemporary Spanish and Spanish American Literature.**
(3-0-3); on demand.
Prerequisite: SPA 300. A survey of significant characteristics of 20th century Hispanic literature, including the novel, the short story, the drama, the essay, and poetry.

**SPA 440. Seminar in Hispanic Literature.**
(3-0-3); on demand.
Prerequisite: SPA 300. Group instruction and practice in research methods peculiar to Hispanic literature.

**SPA 476. Directed Studies.**
(1 to 3 hrs.); on demand.
This course is a directed study for the undergraduate Spanish major. Each request for the course will be considered on its own merits in relation to the special needs of the student.

**SPA 499C. Senior Seminar in Spanish.**
(3-0-3); on demand.
Prerequisites: senior standing, 15 hours of upper level Spanish courses. An integrative capstone course in Spanish. A review of key components of Spanish grammar, culture, literature and of issues related to proficiency in Spanish (speaking, listening, reading, and writing) and to career opportunities for Spanish majors. This course satisfies the integrative component for general education.

**SPMT - Sport Management Courses**

**SPMT 100. Introduction to Sport Management.**
(3-0-3); I, II.
The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures and requirements for a successful career as a sport administrator.

**SPMT 102. Diversity in Sport and Physical Activity.**
(3-0-3); II.
Prerequisite: SPMT 100. This course has been developed to assist students in understanding the historical, philosophical, theoretical, and practical exploration and analysis of diversity and multicultural issues present in American society, and how they relate to sport and physical activity. Emphasis is placed on persons with exceptionality, ethnicity, culture, gender, youth at risk, sexual orientation, and aging.

**SPMT 200. Management of Sport and Physical Activity Programs.**
(3-0-3); I.
Prerequisite: SPMT 100. This course has been developed to assist students in understanding the management principles and procedures applicable to sport and physical activity programs. Emphasis will be on management of personnel, facilities, finances and the related legal issues applying to sport and physical activity.

**SPMT 204. Sport Finance.**
(3-0-3); II.
Prerequisite: SPMT 100. This course has been developed to assist
students in understanding the basic concepts, theories and organization of financial management as applied to sport.

**SPMT 206. Ethics in Sport and Physical Activity.** (3-0-3); II.
The study of moral issues related to sport in intrinsic and extrinsic dimensions, and the development of a personal philosophy regarding sport responsibility in a sport management setting.

**SPMT 304. Sport Economics.** (3-0-3); I.
*Prerequisite: SPMT 204.* The study of how economic theory applies to amateur and professional sport. Topics include the cost and market structures of professional sport, the economics of stadiums and arenas, and the economic impact of sport teams on a local economy.

**SPMT 307. Sport Marketing.** (3-0-3); II.
The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures, and requirements for a successful career in sport marketing.

**SPMT 309. Risk Management in Sport and Physical Activity.** (3-0-3); II.
This course has been developed to assist students in understanding the complexities of risk management, a distinct companion to sport law. Students will be exposed to policies, procedures, safety audits, risk reviews, and emergency action plans to combat the flood of lawsuits that confront the physical activity, recreation, and sport industries.

**SPMT 310. Governance in Sport.** (3-0-3); II.
The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures, and requirements for successful careers as a sport administrators.

**SPMT 380. Sport Media Relations.** (3-0-3); I.
This course has been developed to introduce the student to the components necessary to manage a successful sport media relations program as well as perform all the functions of a sport information director. The preparation of materials for distribution to media outlets, such as media guides, game programs and special event publications as well as the organization of statistical information for publications will be discussed. The management of press conferences, press boxes and sport personnel interviews and the impact of technology on these events will also be covered.

**SPMT 402. Planning, Designing and Managing Sport and Physical Activity Facilities.** (3-0-3); I.
The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures, and requirements for successful facility/event management. A "B" or better is required in this course for admission into the program.

**SPMT 430. Sport in a Global Society.** (3-0-3); II.
This course is designed to allow the student to study the role of sport as a global industry and its political, financial, and cultural impact on individuals, groups, and society. Emphasis of the course focuses upon the various issues that sport administrators may face on a daily basis including but not limited to substance use and abuse, academic dishonesty, discrimination, finance, commercialization, and violence.

**SPMT 450. Field Experience Preparation.** (2-0-2); II.
This course is designed to prepare the student for the field experience component of the program.

**SPMT 471. Sport Management Internship.** (12-0-12); I, II, III.
*Prerequisites: SPMT 450, completion of all sport management coursework, and overall GPA of 2.0 or higher. Petition required.* This course will provide students with practical experiences in sport administration that might include high school, collegiate, or professional settings, as well as not-for-profit agencies or the private sector. This course requires 540 approved internship contact hours for completion.

**SPMT 476. Special Problems in Sport Management.** (1-3 hrs.); on demand.
*Prerequisites: senior standing and consent of the Program Coordinator, Associate Dean, and advisor.* This course is a self-directed, independent study on a specific problem based on written proposal and justification submitted by the student prior to registration. Each request will be considered on its own merit in relation to the special needs, interest, and abilities of the student.

**SPMT 480. Legal Aspects of Sport & Physical Activity.** (3-0-3); I.
*Prerequisite: SPMT 309.* The study of legal terms and concepts and their applications to sport and physical activity. Topics to be covered include negligence, risk management, intentional torts, contract law, constitutional law, and sport and legislation.

**SPMT 481. Employee Service Management in Sport and Physical Activity Settings.** (3-0-3); I.
The study of employee services in sport and physical activity settings which provides practical solutions to work/life issues enabling the organization or agency to recruit and retain a quality workforce. Programming opportunities that will be identified will assist in improving relations between employees and management, increase overall productivity, boost morale, and reduce absenteeism and turnover in sport and physical activity organizations.

**SPMT 482. Current Issues in Sport Management.** (3-0-3); II.
*Prerequisite: junior or senior standing sport management major.* This course is designed to immerse the sport management junior or senior level student in the in-depth study, discussion, reflection, and research of current topics and issues within the sport management profession.

**SPMT 499C. Senior Capstone.** (3-0-3); II.
This course is a culminating experience in which students will review and use the knowledge, skills, and abilities acquired during
their undergraduate program to prepare to take the professional exams required to secure desirable employment. This course satisfies the integrative component requirement for general education.

SSE - Space Science and Engineering Courses

SSE 110. Introduction to Spaceflight. 
(3-0-3); I. 
Prerequisite: "C" or better in MATH 093 or minimum ACT math subscore of 20. History of spaceflight, rocket propulsion, rocket subsystems (engines, cryogenic, hypergolics, alternative propulsion, TVC, power, RCS, staging, telecommunications), ground operations, launch operations, and orbital mechanics will be investigated.

SSE 120. Satellites and Space Systems I. 
(2-2-3); I. 
Corequisite: MATH 174 or MATH 175. Introduction to satellites and space systems; orbital mechanics; the space environment; satellite applications; spacecraft design considerations; roles played by universities, industries, and government in space exploration and utilization; and future technologies of spacecrafts and satellites. Laboratory sessions will give hands-on experience in the fabrication and assembly of spacecraft components.

SSE 122. Satellites and Space Systems II. 
(2-2-3); II. 
Prerequisites: SSE 120, MATH 174 or MATH 175. SSE 122 is a continuation of SSE 120. It covers the topics that were introduced in SSE 120 in more detail with examples in developing spacecraft subsystems such as structures, electrical power systems, command and data handling, communications, thermal management and operations. Laboratory session will give hands on experience in the fabrication and assembly of spacecraft components.

SSE 123. Concepts and Experiences in Energy. 
(3-0-3); I. 
An interdisciplinary approach to the study of energy. Incorporates experiences and concepts from motion, heat, light, magnetism, electricity, radioactivity, and sound waves. Equates with PHYS 123, SCI 123, and IET 123. This course satisfies the NSC II requirement for general education.

SSE 299. Selected Topics in Space Science and Engineering. 
(3-0-3); on demand. 
Investigation of specific topics in space sciences, astronautical engineering, satellite systems, and space mission operations.

SSE 324. Radio Astronomy. 
(3-0-3); on demand. 
Prerequisite: PHYS 232 and ASTR 125. A study of astrophysically interesting phenomena utilizing the techniques of the science of radio astronomy; topics include galactic structure, radio galaxies, cosmic jets and black holes, interstellar molecules and instrumentation in radio astronomy, with a major emphasis in the methods of research in experimental astrophysics. Equates with ASTR 324/PHYS 324.

(3-0-3); I; odd years. 
Prerequisites: ITEC 141 and SSE 122. This course is a comprehensive introduction to digital control systems for space applications. A presentation of fundamental topics in digital controls is reinforced with hands-on laboratory experience. The course covers elements of real-time computer architecture; input-output interfaces and data converters; analysis and synthesis of sampled-data control systems using classical and modern (state-space) methods; analysis of trade-offs in control algorithms for computation speed and quantization effects. Laboratory projects emphasize practical digital servo interfacing and implementation problems with timing, noise, and nonlinear devices.

SSE 341. Solid-State Electronic Devices and Applications. 
(3-0-3); II. 
Prerequisites: ITEC 141 and PHYS 232. This course covers the fundamental concepts and operational principles of semiconductor devices and their applications. The course content includes semiconductor materials, carriers in semiconductors, energy bands, Fermi-Dirac distribution, p-n junctions, metal-semiconductor junction, field-effect transistors, bipolar junction transistors, high-speed transistors, solar cells, detectors and sensors as well as their applications, especially in space. The degradation and protection of semiconductor devices in space are introduced. Lab activities are embedded in the course. Equates with ITEC 341.

(3-0-3); II; even years. 
Prerequisites: SSE 340. Corequisite: PHYS 270. Advanced Space Systems Engineering provides an in depth view of the technologies, software, and processes needed to understand and develop spacecraft systems and instrumentation. Specifically, the course will cover the use of digital processors and software and place emphasis on the methods used in spacecraft communications, health monitoring and anomaly detection and resolution. The emphasis will be on how current technology is incorporated into the planning, designing, fabrication, integration, and testing of modern space systems.

SSE 380. Materials Science for Space Applications. 
(3-0-3); II. 
Prerequisites: MATH 175 and PHYS 231. Materials fundamentals of atoms and molecules, atomic bonding, crystal structures and defects, atomic diffusion, thermal behavior, radiative and thermal degradation, solidification and phase diagrams are introduced. Various types of materials and coatings that function properly in the extreme conditions of the space environment, such as ionizing radiation, corrosion, erosion and extreme temperatures are studied. Materials studied include iron, aluminum, titanium, nickel and refractory alloys, polymers, ceramics and composites. The coatings cover radiation-, corrosion-, erosion-resistant and thermal coatings.

SSE 399. Selected Topics 
(1 to 4 hours); on demand. 
Prerequisites: vary, depending on topic. In-depth guided study of topics that either go beyond regular course work or that are not regularly offered in the curriculum.
SSE 431. Space Plasma Physics.  
(3-0-3); on demand.  
Prerequisite: PHYS 232. Corequisite: MATH 276 or 363. An introduction to plasma physics and its applications to space and astrophysical systems, with an emphasis on the Earth’s environment in space. Topics will include the motion of charged particles in electromagnetic fields, the description of plasmas in the framework of one- and two-fluid approaches, and its description in the framework of kinetic theory. Plasma equilibria, waves, and instabilities will also be discussed. Equates with PHYS 431/ASTR 431.

SSE 442. RF/Microwave Systems and Antennas,  
(2-2-3); I.  
Prerequisites: ITEC 242 and ITEC 344. RF/Microwave systems and antennas design, analysis, fabrication, test and characterization. Transmission lines in general, introduction to waveguides, planar transmission lines, concept of impedance matching for optimum power transfer, measurement methods for transmission lines, introduction of S-parameters. Antennas in general, printed antennas, reflector antennas, fabrication techniques for printed antennas, impedance and radiation measurements for antennas. Microwave components used in systems such as filters, isolators, directional couplers and power splitters will also be covered.

SSE 476. Directed Research  
(1 to 6 hours); I, II, III.  
Prerequisite: petition required. Participation in a research project under faculty guidance.

SSE 498. Senior Design Project I.  
(2-0-2); I, II.  
Prerequisites: SSE 360 and senior standing. A directed research project will be designed, data will be collected and analyzed, in consultation with a faculty advisor. A primary literature search and research proposal will be completed using library facilities and current technology. This research project will culminate with a scientific paper and oral presentation in SSE 499C.

SSE 499C. Senior Design Project II.  
(3-0-3); I, II.  
Prerequisite: SSE 498. Completion of the directed research project begun in SSE 498. A formal report that includes the basic literature search and appropriate experimental work will be prepared in a form suitable for submission to a scientific journal. A scientific oral presentation of the research will be made to the faculty. In addition, an oral presentation at a state, regional, or national scientific meeting will be encouraged. This course satisfies the integrative component for general education.

SWK - Social Work Courses

(3-1-4); I, II, III.  
Prerequisite: completion of 24 hours of general education requirements. This course provides an introduction to contemporary fields of social work practice in both primary and secondary settings. The principal focus of the course is familiarization of students to the breadth and scope of professional social work intervention into contemporary societal problems.

SWK 230. Social Welfare History and Ethics.  
(3-0-3); I, II.  
Prerequisite: SWK 210. The dominant values of American society that influence both social welfare policy and social work practice are explored through a study of the historical evolution of the institution of social welfare from the Colonial period to the present in this country. Equates with WST 230.

SWK 300. The Criminogenic Family.  
(3-0-3); I, II.  
The course focuses on family risk factors for later delinquency and criminal behavior as well as preventative intervention and treatment. This course examines a variety of factors, including childhood maltreatment, family violence, family alcoholism, drug addiction, family chaos, inadequate or neglectful parenting, corporal punishment, which are known risk factors for later criminal behavior. Students gain a general understanding of the macro-level processes that have detrimental effects on family functioning and family structure. Equates with WST 302 and CRIM 300.

SWK 301 Comparative Family Violence: An International Perspective.  
(3-0-3); I.  
A comparative approach of family violence in the United States and Canada are the primary focus of this course but may also include other countries. Family violence is divided into four topics: Partner/Spousal Abuse, Violence Against Children and Youth by Family Members, Family Violence Against Older Adults, and Cultural Issues. Content covered within these areas include: historical overview, definitions, theoretical frameworks, prevalence, incidence, research, responses, and legislation. Equates with IST 302 and WST 303.

(3-0-3); I.  
Prerequisites: CRIM 210 and three additional hours of criminology or consent of instructor. This course examines the extent, ecological distribution, and theories of delinquency in contemporary American society, including a critical examination of trends and methods of treatment of delinquency. Equates with CRIM 306 and SOC 306.

(1-2-3); I, II, III.  
Prerequisites: junior or senior standing and major or minor in social work; SWK 210 and 333 or 360. This course includes observation and work experience in a social work agency under the supervision of a professional.

(3-0-3); I, II.  
Students learn local, state, and national policies and programs designed to provide for the care, protection, and support of children.

SWK 320. Human Behavior in the Social Environment-Conception to Young Adulthood.  
(3-0-3); I, II.  
Prerequisites: BIOL 105, PSY 154, SOC 101 and SWK 230. Corequisite: SWK 324. Students study the development of human behavior in the context of social systems. Primary emphasis is on an exploration of needs and tasks of individuals, groups, families,
organizations, and communities during various life-stages of growth and development. Environmental concerns affecting women, minorities and other special populations are examined.

**SWK 321. Human Behavior in the Social Environment—Middle Adulthood to Death.**
*(3-0-3); I, II.*
*Prerequisites: BIOL 105 or 155, PSY 154, SOC 101, SWK 210, 230, 320, 324. Corequisite: SWK 451.* Students study the development of human behavior in the context of social systems. Primary emphasis is placed on an exploration of needs and tasks of individuals, groups, families, organizations, and communities during various life-stages of growth and development. Environmental concerns affecting women, minorities and other special populations are examined.

**SWK 324. Social Work Research.**
*(3-0-3); I, II, III.*
This course provides an examination into the premises and practices of social science research. When addressing quantitative and qualitative approaches, students explore the issues of research designs, data collection, and data analysis. In the end, students are able to determine ways in which empirical studies can enhance their subsequent careers in the field of human services.

**SWK 325. Social Work Generalist Perspective.**
*(3-0-3); I, II.*
*Prerequisite: SWK 210.* This course introduces students to knowledge, values and skills, for generalist social work practice. It prepares students to enhance the well-being of people and ameliorate environment conditions that affect them adversely. The focus is on the planned change or Generalist Intervention Model within a strengths perspective.

**SWK 326. Generalist Practice Lab.**
*(1-2-3) I, II.*
*Prerequisite: SWK 325. Corequisites: SWK 321 and SWK 451.* This course provides students with an opportunity to apply the knowledge, skills and values gained in SWK 325 through a lab (field) experience (120 hours). Students will apply the Generalist Intervention Model in an agency setting. They also will learn more specifics about the different areas of social work practice. Students will continue to practice attending skills and ethical social work behavior in a social service agency.

**SWK 330. Applied Medical Sociology.**
*(3-0-3); II.*
*Prerequisite: three hours social work general education.* This course examines the social, cultural, and psychological factors which influence health behaviors; provides an overview of health care delivery systems and policies; and an analysis of the role of social workers and other health professionals. Equates with SOC 330.

**SWK 333. Beginning Skills for Human Service Professionals.**
*(3-0-3); I, II, III.*
This course provides students with knowledge and beginning helping skills that can be applied to assist individuals who are having social/emotional problems.

**SWK 334. Sociology of Gender Violence: Prospectives on Women and Intimate Partner Violence.**
*(3-0-3); II.*
*Prerequisite: SOC 101, SOC 203 or WST 273.* This course offers social science and experiential exposure to the controversies, theories, patterns, policies, and treatment unique to women’s experiences with date, acquaintance, and spousal violence. Focus also is given to marginalized groups, including women of low income, women of color, and women in same-sex relationships. Equates with WST 333, SOC 333 and CRIM 333.

**SWK 335. The Family.**
*(3-0-3); I.*
This course provides students with information about family interpersonal and social structural dynamics in the multicultural diverse U.S. society of the 21st century. The course increases students’ awareness about the ways in which other social institutions such as the economy, religion, and education can either negatively or positively influence family structure and function. Equates with SOC 335.

**SWK 340. Community Mental Health.**
*(3-0-3); on demand.*
This course provides a microscopic perspective of the institutions and programs that have evolved in response to understanding a class of persons traditionally dependent upon medicine and social programs. Emphasis is placed upon review of the values, knowledge, and skills characteristic of the entry-level social worker in the community mental health agency. Equates with WST 340.

**SWK 345. Law and Social Work.**
*(3-0-3); I, II, III.*
This course focuses on legal and legislative processes involving licensing and certification of the profession; rights of clients and special populations; access to legal and social services; testifying before judicial and legislative bodies; and other legal issues and concerns facing social work practitioners.

**SWK 358. Child Abuse and Neglect.**
*(3-0-3); I.*
This course is designed to provide a comprehensive introduction to child abuse and neglect from a social work perspective. Students learn the extent of the problem, effects on children, treatment issues, and social worker’s role in a multidisciplinary team approach.

**SWK 360. Crisis Intervention.**
*(3-0-3); I, II.*
This course provides an overview of strategies for addressing critical situations requiring immediate intervention. Subjects include threatened suicide, rape trauma, domestic violence, violent episodes of mental illness, and physical assaults.

**SWK 370. Substance Abuse Counseling.**
*(3-0-3); on demand.*
Causes of alcoholism and other substance abuse are addressed as well as an overview of policy and practice issues for providing effective treatment of those afflicted. The course includes a comparison of existing treatment techniques and programs commonly used.
SWK 380. Social Work Practice in Health Care. (3-0-3); on demand.
This course examines the practice of social work in health care settings. The roles and tasks of social workers in hospital, long-term care, hospice, and home health care settings are discussed and analyzed. Special emphasis will be placed on rural issues that impact practice delivery in these settings.

SWK 381. Race, Class, Gender and Crime. (3-0-3); I, II.
This course focuses on the intersection of race, class and gender membership with regard to treatment within criminal justice system by police, judges, juries and actual sentencing decisions including the death penalty. The course also provides insights about the unique types of crime most likely to be perpetrated by specific demographic groups. Students are also exposed to criminological theories that explain criminal justice system disparity, discrimination, and differences in actual offending patterns. Equates with CRIM 380 and WST 380.

SWK 399. Selected Topics. (1 to 3 hrs.); on demand.
Unique topics and learning experiences that supplement regular course offerings. May be repeated in additional subject areas.

SWK 400. Special Problems. (1 to 3 hrs.); I, II, III.
Prerequisite: consent of instructor and social work director. Students arrange with department to study a particular topic in the social work field.

SWK 416. Working with Offenders. (3-0-3); II.
Students learn the basic structure of the counseling process with offenders, including techniques and practice skills. Equates with CRIM 416.

SWK 420. Social Work Administration and Management. (3-0-3); on demand.
This course examines the history, nature, organizational structure, and philosophy of the administration of public programs of income maintenance and other welfare services, consideration of the role of voluntary agencies.

SWK 424. Social Work Micro Practice. (3-0-3); I, II.
Prerequisites: SWK 325, 451 and formal program screen-in. Corequisites: SWK 426 and 430. In this course, students develop skills related to interviewing, data collection, assessment, goal development, interventive strategy formulation, contracting, interventive counseling, and monitoring/evaluation design as they relate to the application of the social work method to micro-level individual client systems.

SWK 426. Social Work Mezzo Skills. (3-0-3); I, II.
Prerequisites: SWK 325, 451, and formal program screen-in. Corequisites: SWK 424 and 430. Students continue the development of skills associated with the application of the social work method to mezzo-level therapeutic groups, task-centered groups, marital and family client systems.

SWK 430. Social Policy and Planning. (3-0-3); I, II.
Prerequisites: GOVT 242, SWK 325, 451, and formal program screen-in. Corequisites: SWK 424 and 426. Students apply a framework of analysis to a variety of social welfare policies. This course provides an exposure to social-economical-political-legal issues affecting social welfare policy formulation, selection of delivery systems, and program funding.

SWK 435. Group Dynamics. (3-0-3); on demand.
This course is designed to give the student an understanding of group methods and the theories underlying the use of groups in the helping process. Special emphasis is given to the processes that affect the development and functioning of all types of groups.

SWK 441. Gerontology. (3-0-3); II.
This course offers an analysis of aging designed to provide the student with a knowledge of the social factors involved in the aging process as well as the effects of social, political, and economic conditions on the welfare of the elderly. Equates with SOC 441.

SWK 445. Death and Dying. (3-0-3); I.
Students analyze death and dying as social processes and problems; strategies for working with dying persons. Equates with SOC 445.

SWK 451. Social Science Data Analysis. (3-0-3); I, II.
Prerequisites: completion of all general education requirements, SWK 320, 324 and formal program screen-in. This course deals with the logic of data preparation and computer assisted analysis. Appropriate methods of evaluating and applying standard social science data analysis techniques are discussed and experience in utilizing these methods is provided. In addition, the course covers the basic skills required to evaluate and write research reports. Equates with SOC 451.

SWK 458. Child Abuse and Neglect Practice Skills. (3-0-3); II.
Prerequisites: SWK 315 and 358. This course is designed to teach social work practice skills specific to child abuse and domestic violence. Students will learn interviewing and assessment skills, case planning and decision making, guidelines for court involvement, as well as cultural considerations in child rearing practices and communication/gender issues.

SWK 497. Practicum in Social Work. (0-8-8); I, II.
Prerequisites: SWK 325 and 451, and formal program screen-in. Corequisites: SWK 498 and 499C. Students integrate theory and method to actual case situations assigned within a 400 hour professionally supervised field experience within a selected human service organization.

SWK 498. Social Work Macro Practice. (1-2-3); I, II.
Prerequisites: SWK 424, 426, 430, and formal program screen-in. Corequisites: SWK 497 and 499C. Students continue learning the
skills associated with the application of the social work method to macro-level organizational, neighborhood and community client systems.

**SWK 499C. Senior Seminar.**
(3-0-3); I, II.
Prerequisites: SWK 424, 426, 430 and formal program screen-in; capstone semester. Corequisites: SWK 497 and 498. Preparation for applying and interviewing for prospective professional employment, taking state merit examinations, taking licensing and certification tests, and enrolling within graduate programs of social work. Discussions also focus upon issues at the workplace. This course satisfies the integrative component for general education.

**THEA - Theatre Courses**

**THEA 100. Fundamentals of the Theatre.**
(3-0-3); I.
An introduction to the theatre as an art form, its historic and organizational structure. For theatre majors and minors.

**THEA 101. Voice and Articulation.**
(3-0-3); II.
Essentials of distinct utterance, phonetic transcription, and uses of the vocal mechanism.

**THEA 105. Modern Dance Technique.**
(3-0-3); I, II.
A study and application of basic modern dance technique.

**THEA 107. Introduction to Dance Performance Art.**
(3-0-3); I.
A foundation course in understanding dance as a performance art that fosters creativity, education and nonverbal communication.

**THEA 110. Introduction to the Theatre.**
(3-0-3); I, II.
This course is an introduction to theatre as an art form, including its historical and organizational structures, and satisfies the area studies-humanities for general education. By spending class time and homework time thinking about philosophical assumptions, cultural practices, and historical moments different than our own (in Classical Greece, Elizabethan England, Medieval Japan, Modern Europe, 20th Century United States, and elsewhere), students will connect themselves to universal human impulses, gain perspective on the varieties of human expression and experience, and consider opportunities for contributing to their communities, both artistically and civically. This course satisfies the HUM I requirement for general education.

**THEA 177. Theatre Production and Performance Practicum.**
(0-4-1); I, II.
Practical experience and opportunities in theatre production and performance.

**THEA 200. Introduction to Dramatic Literature.**
(3-0-3); II.
Representative dramatic literature from Greek antiquity to the present.

**THEA 205. Intermediate Modern Dance.**
(3-0-3); I, II.
Prerequisite: THEA 105. A continued study and application of Modern Dance Technique.

**THEA 207. Dance Improvisation.**
(3-0-3); II.
A study of improvisational tools used for creating and exploring dance.

**THEA 208. Beginning Ballet.**
(1-4-3); on demand.
A study and application of basic ballet techniques.

**THEA 210. Technical Production.**
(1-4-3); II.
A study of the technical elements in theatrical production; set construction, lighting, and sound.

**THEA 211. Costume Construction I.**
(3-0-3); I, II.
A course in basic costume construction techniques.

**THEA 225. Introduction to Theatre Production Design.**
(3-0-3); I.
A study of design and technical fundamentals of theatre including scenery, lighting, and costumes. The fundamentals include concept and design development, research, and communication skills.

**THEA 277. Theatre Production and Performance Practicum.**
(0-4-1); I, II.
Practical experience and opportunities in theatre production and performance.

**THEA 284. Acting Techniques.**
(3-0-3); I, II.
A study of acting from both the aesthetic and the practical viewpoints; exercises in pantomime and vocal techniques.

**THEA 305. Advanced Modern Dance Technique.**
(3-0-3); I, II.
An advanced study and application of Modern Dance Technique.

**THEA 307. Dance Composition.**
(3-0-3); I.
Prerequisite: THEA 107 or THEA 207. An exploration of movement resources used for constructing dance, developing choreographic skills and interpreting movement.

**THEA 308. Intermediate Ballet.**
(1-4-3); on demand.
Prerequisite: THEA 208 or consent of department chair. A further study of ballet techniques and profiles of famous dancers.

**THEA 309. Tap Dancing.**
(1-4-3); on demand.
A study and application of tap dance techniques.

**THEA 310. Stage Movement.**
(3-0-3); I, even years.
The study of how the human body functions in space and the application of specialized techniques such as improvisation, mask work, and stage combat to dramatic creation.

THEA 311. Theatre Seminar I. 
(3-0-3); on demand. 
Prerequisite: THEA 100 or consent of instructor. Development of proficiency in specific areas of theatre. May be repeated if student has not received course credit for topic.

THEA 312. Theatre Seminar II. 
(3-0-3); on demand. 
Prerequisite: THEA 100 or consent of instructor. Development of proficiency in specific areas of theatre. May be repeated if student has not received course credit for topic.

THEA 313. Theatre Seminar III. 
(3-0-3); on demand. 
Prerequisite: THEA 100 or consent of instructor. Development of proficiency in specific areas of theatre. May be repeated if student has not received course credit for topic.

THEA 314. Acting for the Camera. 
(3-0-3); I, odd years. 
Commercial and TV acting will be explored. The course includes live taping of selected material and the fundamentals of working with the camera, staging, and shooting out of sequence.

THEA 315. Stage Makeup. 
(2-2-3); on demand. 
Study and application of makeup and techniques for the stage.

THEA 316. Stage Properties. 
(2-2-3); on demand. 
The study and practice of stage properties, their construction, acquiring, and repair; the study of furniture history.

THEA 317. Scene Painting. 
(2-2-3); on demand. 
The study and practice of paints and painting techniques as they apply to the scenic artist.

(3-0-3); I. 
A historic overview and application of Hip-Hop and Urban Dance.

THEA 319. Jazz Dance. 
(3-0-3); II. 
A study and application of Jazz Dance technique.

THEA 321. Stage Lighting. 
(2-2-3); I, odd years. 
Prerequisites: THEA 210 and 225. The mechanical and artistic approach to stage lighting; study of electrical theory and instrument utilization.

THEA 322. Scene Design. 
(2-2-3); II. 
Prerequisites: THEA 210 and 225. The study of design theories with the creation and development of scene design projects and rendering techniques.

THEA 324. Dance History. 
(3-0-3); II. 
A study of the origins, profiles and evolution of dance in America.

THEA 325. Costume History. 
(3-0-3); on demand. 
A study of fashion and clothing trends throughout history.

THEA 326. Costume Design. 
(3-0-3); I, even years. 
Prerequisite: THEA 225. A study of fashion and clothing trends throughout history.

THEA 328. Creative Sewing for the Theatre II. 
(1-4-3); II. 
A course in creating original patterns for stage costumes.

THEA 340. Auditioning. 
(3-0-3); II, odd years. 
Prerequisite: THEA 100 or THEA 110 or consent of department chair. This course is designed to prepare students for the professional world of acting with particular emphasis on the process of auditioning. Each student will prepare and perform multiple audition pieces under a variety of circumstances most often experienced by the professional actor.

THEA 354. Theatre History. 
(3-0-3); I, even years. 
Prerequisite: THEA 100 or THEA 110 or consent of department chair. A study of the origins and development of theatre.

THEA 355. Theatre History II. 
(3-0-3); II, odd years. 
Prerequisite: THEA 100 or THEA 110 or consent of department chair. A study of the origins and development of theatre in the 19th and 20th centuries.

THEA 375. Creative Dramatics. 
(3-0-3); II. 
An analysis and application of principles of creative dramatics as applied to classroom curricular activities.

(0-4-1); I, II. 
Practical experience and opportunities in theatre production and performance.

THEA 380. Play Directing. 
(3-0-3); II. 
Prerequisites: THEA 100, THEA 225, and THEA 284. Theories and principles of directing; director's interpretation; casting; planning acting and making the prompt-book.

THEA 408. Advanced Ballet. 
(1-4-3); on demand. 
Prerequisite: THEA 308 or consent of instructor or department chair. Advanced study of ballet techniques and profiles of historical dances.

THEA 412. Playwriting. 
(3-0-3); on demand. 
Prerequisites: THEA 100, 200, or consent of the department chair. Analysis of the structure of plays and the writing of original
THEA 413. Advanced Play Direction. (3-0-3); on demand.
Prerequisite: THEA 380. To develop greater proficiency in techniques of directing as related to specific productions and staging problems.

THEA 430. Summer Theatre III. (4-0-4); III.
Prerequisite: acceptance into summer theater company. Advanced assignments in set and costume design or advanced acting and directing. May be repeated.

THEA 452. Early Dramatic Literature. (3-0-3); on demand.
A detailed study of representative plays from the Greeks to mid-19th century.

THEA 453. Modern Dramatic Literature. (3-0-3); on demand.
A detailed study of the drama from the growth of realism to the present day.

THEA 455. Dramatic Criticism. (3-0-3); on demand.
Prerequisite: THEA 100, 200 or consent of the department chair. Dramatic theory and criticism as developed through Aristotle, Horace, the middle ages, the Renaissance and the 20th century.

THEA 462. Advanced Acting. (3-0-3); on demand.
Prerequisite: THEA 284 or consent of the department chair. Advanced study of acting, including analysis and development of characters in acting situations.

THEA 463. Advanced Costuming. (2-2-3); on demand.
Prerequisite: THEA 326 or consent of the department chair. Designing costumes for theatrical productions, making patterns, and the fabrication of garments for the stage.

THEA 464. Advanced Stage Design. (2-2-3); on demand.
Prerequisite: THEA 322 or consent of the department chair. To develop greater proficiency in the skills of scenic design as applied to specific problems and theatrical productions.

THEA 465 Advanced Stage Lighting. (2-2-3); on demand.
Prerequisite: THEA 321 or consent of the department chair. To develop proficiency in the skills of lighting productions; to research topics and special problems pertaining to stage lighting.

THEA 470. Children’s Theatre. (3-0-3); on demand.
Prerequisite: THEA 100 or THEA 110 or consent of the department chair. A concentrated study of the problems involved in the organization and production of plays for and with children.

THEA 476. Special Problems in Theatre. (1 to 3 hours); I, II, III.
Prerequisite: consent of instructor. Independent study and research of an area of the student’s choosing. Requires completion of paper or other tangible evidence of the results of the study.

THEA 477. Theatre Production and Performance Practicum. (0-4-1); I, II.
Practical experience and opportunities in theatre production and performance.

THEA 484. Styles of Acting. (3-0-3); on demand.
Prerequisite: THEA 284. A study of techniques for creating characters from various dramatic styles and historical periods through research and performance.

THEA 499C. Senior Seminar Theatre. (3-0-3); II.
Prerequisites: senior standing and completion of a minimum of 18 hours toward a major in theatre or consent of the department chair. This course is designed for students majoring in theatre. It entails individualized and group instruction, assessment and career preparation focused on disciplinary competencies and general life skills with an emphasis on the integration of knowledge and skills acquired in the program. This course satisfies the integrative component for general education.

VET - Veterinary Technology Courses

VET 108. Veterinary Clinical Anatomy. (2-2-3); I.
Prerequisite: admission to Veterinary Technology Program. A basic comparative anatomy of domestic animals with an emphasis on the structure and function of the major organ systems. The laboratory will include identification of anatomical structures.

VET 112. Animal Care Techniques I. (2-4-4); I.
Prerequisites: Admission to Veterinary Technology Program. A study of basic care and management of the canine, feline, and equine species encountered in veterinary practice. The laboratory will include essential tasks related to the handling, restraint, treatment, and routine care of animals.

VET 213. Animal Care Techniques II. (2-4-4); II.
Prerequisites: "C" or better in VET 108 and VET 112. A study of basic care and management of common laboratory animal species and basic veterinary surgical nursing. The laboratory will include essential tasks related to the handling, restraint, treatment, and routine care of laboratory animals, surgical nursing techniques, personnel, instrumentation equipment, and facilities.

VET 218. Introduction to Veterinary Laboratory Techniques. (3-2-4); II.
Prerequisites: "C" or better in VET 108 and VET 112. An introductory course in veterinary laboratory techniques, including comparative hematology and parasitology of domestic animals. The clinical aspects of laboratory exams and the theory behind the tests utilized in a veterinary or biomedical laboratory will be emphasized. Hematology concepts, laboratory tests and applications...
of information from blood analysis are discussed in lecture. Comparative parasitology and coprology includes identification of external and internal parasites, knowledge of parasite life-cycles, zoonoses and commonly performed laboratory exams.

**VET 245. Veterinary Physiology & Pharmacology. (3-2-4); II.**

*Prerequisites: "C" or better in VET 108, VET 112, MATH 131 or higher.* This course will study the mechanisms that control normal life processes in the animal body. This course will also emphasize those body systems that are of primary concern during the administration of anesthesia and other pharmacological procedures. The student will learn the specific anesthetic agents and other pharmacologic agents that are used in veterinary medicine, their proper dosages, side effects, and routes of administration.

**VET 257. Concepts of Large Animal Diseases I. (2-0-2); I.**

*Prerequisites: "C" or better in VET 213, VET 218 and VET 245. Corequisite: VET 261.* This foundational course will teach technicians the practical and applied methodology for disease diagnostics and technical skills for treatment of large animal patients. Students are given foundational health and disease clinical sessions with actual patients. The students are evaluated on their level of skill and knowledge about the patient, their participation in clinical discussions and patient care, and the focus of their methodology for determining appropriate diagnostic testing and treatment of the patient.

**VET 258. Small Animal Medicine & Surgery I. (2-0-2); I.**

*Prerequisites: "C" or better in VET 213, VET 218 and VET 245. Corequisite: VET 262.* A study of clinical procedures, techniques and preventive medicine principles related to assisting the practicing veterinarian with small animal clinic cases, hospital management, and client education related to companion animal practice. Some evenings and weekend duties are required.

**VET 259. Veterinary Clinical Pathology I. (2-0-2); I.**

*Prerequisites: "C" or better in VET 213, VET 218, and VET 245. Corequisite: VET 264.* A course in veterinary clinical pathology, including topics in hematology and parasitology and in introduction to clinical chemistry, serology and urinalysis. The clinical aspects of laboratory exams and the theory behind the tests utilized in a veterinary or biomedical laboratory will be emphasized. Concepts, laboratory tests and application of information from laboratory analysis are discussed in lecture.

**VET 260. Veterinary Diagnostic Imaging. (2-0-2); I.**

*Prerequisites: "C" or better in VET 213, VET 218, and VET 245. Corequisite: VET 265.* The purpose of this course is to study the principles for diagnostic imaging and imaging procedures and techniques designed to provide diagnostic information in small and large animal radiology and ultrasonography.

**VET 261. Large Animal Clinics I. (0-3-1); I.**

*Prerequisites: "C" or better in VET 213, VET 218, and VET 245. Corequisite: VET 257.* This foundational clinical experience will
VET 359. Veterinary Clinical Pathology II.  
(2-0-2); II.  
Prerequisites: "C" or better in VET 257, VET 258, VET 259, VET 260, VET 261, VET 262, VET 264, VET 265, and BIOL 213.  
Corequisite: VET 357. An advanced course in veterinary clinical pathology, including topics in hematology and parasitology and an introduction to clinical chemistry, serology and urinalysis. The clinical aspects of laboratory exams and the theory behind the tests utilized in a veterinary or biomedical laboratory will be emphasized. Concepts, laboratory tests and application of information from laboratory analysis are discussed in lecture.

VET 363. Veterinary Preceptorship.  
(0-40-1); I, II, III.  
Prerequisites: "C" or better in VET 355 and 356. An external practicum in which the student makes the transition from school to the workplace. Emphasis is placed upon proper utilization of the knowledge and techniques learned in the academic program and on continued learning. A weekly journal of activities and case reports are required. Consists of a minimum of four weeks at 40 hours per week at an approved veterinary facility.

VET 364. Veterinary Clinical Pathology Clinics II.  
(0-3-1); II.  
Prerequisites: "C" or better in VET 257, VET 258, VET 259, VET 260, VET 261, VET 262, VET 264, VET 265, and BIOL 213.  
Corequisite: VET 359. An advanced course in the clinical application of laboratory testing. An understanding and performance of laboratory procedures including hematology, clinical chemistry, parasitology, serology and urinalysis. Preanesthetic evaluations on clinical cases will be performed, as well as an introduction to new laboratory procedures.

VET 365. Veterinary Dentistry Clinics.  
(0-3-1); II.  
Prerequisites: "C" or better in VET 257, VET 258, VET 259, VET 260, VET 261, VET 262, VET 264, VET 265, and BIOL 213.  
Corequisite: VET 357. This advanced clinical experience will teach technicians the practical and applied methodology for disease diagnostics and technical skills for treatment of large animal patients. Students are given advanced health and disease clinical sessions with actual patients. The students are evaluated on their level of skill and knowledge about the patient, their participation in clinical discussions and patient care, and the focus of their methodology for determining appropriate diagnostic testing and treatment of the patient.

VET 366. Small Animal Clinics II.  
(0-3-1); II.  
Prerequisites: "C" or better in VET 257, VET 258, VET 259, VET 260, VET 261, VET 262, VET 264, VET 265 and BIOL 213.  
Corequisite: VET 358. A study of clinical procedures, techniques and preventive medicine principles related to assisting the practicing veterinarian with small animal clinical cases, hospital management, and client education related to companion animal practice. Some evening and weekend duties are required.

VET 367. Large Animal Clinics II.  
(0-3-1); II.  
Prerequisites: "C" or better in VET 257, VET 258, VET 259, VET 260, VET 261, VET 262, VET 264, VET 265, and BIOL 213.
preventative medicine principles related to assisting the practicing veterinarian with small and large animal clinical cases, research projects, hospital management, laboratory supervision of first and second year veterinary technician students and client education related to companion animal practice.

VET 403. Advanced Veterinary Clinical Practicum. (0-40-12); II.
Prerequisite: VET 401, VET 402 and VET 499C. An advanced practical course in the clinical application and professional aspects of veterinary technology in a veterinary health care setting with an emphasis on the role of the student as an advanced level technologist. The student will be required to demonstrate an advanced level of clinical competency in a number and variety of procedures related to veterinary medicine.

VET 499C. Veterinary Technician Seminar. (3-0-3); I.
Prerequisite: completion of a degree from an AVMA accredited Veterinary Technology Program and enrollment in the Bachelor of Science in Veterinary Technology. This course is designed to provide students in the Veterinary Technology program with a culminating experience to discuss and reflect on concepts that have been learned throughout a veterinary technology program of study. The students will also have the opportunity to present current topics and issues that are relevant to the veterinary profession and animal industry.

WST - Women's Studies Courses
(Equated courses can only be taken once for credit. If an equated course is taken a second time using the different prefix, it will be considered a repeat.)

WST 223. Female Brain and Behavior. (3-0-3); on demand.
Prerequisite: PSY 154. Covers basic structural and functional differences between the female brain and the male brain. Major topics include differences in architecture of the brain, brain neurochemistry, higher brain functions, and disorders. Equates with PSY 223.

WST 230. Social Welfare History and Ethics. (3-0-3); I, II.
Prerequisite: SWK 210 or consent of instructor. Dominant values of American society that influence both social welfare policy and social work practice will be explored through a study of the historical evolution of the institution of social welfare from the Colonial period to the present in this country. Equates with SWK 230.

WST 273. Introduction to Women's Studies. (3-0-3); I, II.
Prerequisite: ENG 100 or equivalent. An interdisciplinary course designed to introduce students to educational, historical, aesthetic, sociological, and political conceptions of gender as defined and experienced by women. This interdisciplinary course satisfies the SBS II requirement for general education.

WST 302. The Criminogenic Family. (3-0-3); I, II.
The course will focus on family risk factors for later delinquency and criminal behavior as well as preventative intervention and treatment. This course will examine a variety of family issues including child maltreatment, domestic violence, family alcoholism, drug addiction, family chaos, inadequate or neglectful parenting, corporal punishment, which are known risk factors for later criminal behavior. Students will gain a general understanding of the macro-level processes that have detrimental effects on family functioning and family structure. Equates with CRIM 300 and SWK 300.

WST 303. Comparative Family Violence: An International Perspective. (3-0-3); I.
A comparative approach of family violence in the United States and Canada will be the primary focus of this course but may also include other countries. Family violence is divided into four topics: Partner/Spousal Abuse, Violence Against Children and Youth by Family Members, Family Violence Against Older Adults, and Cultural Issues. Content covered within these areas include: historical overview, definitions, theoretical frameworks, prevalence, incidence, research, responses, and legislation. Equates with SWK 301.

WST 305. Cultural Anthropology. (3-0-3); I, II.
Prerequisite: BIOL 105, SOC 101. A study of literate and nonliterate cultures using the ethnographic approach. Universal aspects of human experience, including the family, economic, political and religious systems examined in cross-cultural perspective. Equates with SOC 305.

WST 313. Women in American History. (3-0-3); II.
Prerequisite: HIS 250. Experiences and perceptions of women throughout American history. Significant roles and issues are emphasized. Equates with HIS 312.

WST 317. Feminist Political Thought. (3-0-3); I, alternate years.
Prerequisites: GOVT 180 and 289. History and development of feminist political thought. Perspectives include those of Fuller, Millet, Collins, MacKinnon, and Irigiray. Equates with GOVT 317.

WST 320. Women Writers and Feminist Perspectives. (3-0-3); on demand.
Women writers of the 19th and 20th centuries, their feminine vision and voice. Focus on primary works; attention given to feminist criticism in both theory and practice. Equates with ENG 320.

WST 322. Gender and Education. (3-0-3); I.
This course explores gender issues that affect male and female students from preschool to postsecondary education. Equates with EDF 322.

WST 333. Sociology of Gender Violence: Perspectives on Women and Intimate Partner Violence. (3-0-3); II.
Prerequisites: SOC 101, SOC 203 or WST 273. This course offers social science and experiential exposure to the controversies, theories, patterns, policies, and treatment unique to women's experiences with date, acquaintance, and spousal violence. Focus also is given to marginalized groups, including women of low income,
women of color, and women in same-sex relationships. Equates with SOC 333, CRIM 333, and SWK 334.

WST 335. The Family.  
(3-0-3); I.  
This course provides students with information about family interpersonal and social structural dynamics in the multicultural diverse U.S. society of the 21st century. The course will increase students’ awareness about the ways in which other social institutions such as the economy, religion, and education can either negatively or positively influence family structure and function. Equates with SOC 335.

(3-0-3); on demand.  
This course provides a microscopic perspective of the institutions and programs that have evolved in response to understanding a class of persons traditionally dependent upon medicine and social programs. Emphasis will be placed upon review of the values, knowledge, and skills characteristic of the entry-level social worker in the community mental health agency. Equates with SWK 340.

WST 350. The Human Experience of Sex and Gender.  
(3-0-3); I, II.  
Prerequisite: three hours sociology general education. Focus of course will be on meanings attached to sex and gender, theoretical explanations of those meanings, the institutions which influence perceptions and behaviors, and the impact of social definitions and practices on individuals, male and female. Equates with SOC 350.

WST 351. Philosophy of Love and Sex.  
(3-0-3); on demand.  
An exploration of the central philosophical questions concerning love and sex, with reference to classical and contemporary sources: What is love? Why do we love people? Are there different kinds of love? What is sex? What makes sex bad or good, right or wrong? What is the relationship between sex and love, if any? Equates with PHIL 351.

WST 354. The Individual and Society.  
(3-0-3); I, II, III.  
The influence of group processes on individual behavior. Topics covered include personality formation and change; small group behavior and leadership patterns. Equates with SOC 354.

WST 355. Women and Politics.  
(3-0-3); II. alternate years.  
Prerequisite: GOVT 141 and 289. Corequisite: VET 356. Participation of women in American government. Gender differences in political attitudes and voting; impact of electoral laws on election of women; and impact of women on creation and implementation of policy. Equates with GOVT 355.

(3-0-3); II.  
Prerequisite: SOC 350 or WST 273. This course will explore current theoretical debates and empirical studies on the global sex industry. Broad topics this course will cover include the feminist sex wars, stripping, pornography, prostitution and sexual traffick-
structure and function of the community as a social system, the processes of balancing community needs and resources, and planned and unplanned social change. Equates with SOC 426.

**WST 452. Issues in Contemporary Broadcasting.**
(3-0-3); on demand.
**Prerequisite:** senior standing. Treatment of current issues within the electronic media industry. Equates with CMEM 452.

**WST 457. Parenting.**
(3-0-3); alternate years.
**Prerequisite:** HS 253 or consent of instructor. An examination of the parental roles in regard to current challenges, problems, and issues. Early intervention and family center relationships emphasized. Equates with HS 457.

**WST 474. Women’s Health Care.**
(3-0-3); I, II.
**Prerequisites:** CIS 101, COMM 108, ENG 100 and 200. Increase one’s awareness of the importance of women’s health care in all dimensions. Emphasis will be placed on health maintenance issues for women that include women’s developmental issues throughout their life span, general guidelines for health care (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues, and psychosocial concerns.

**WST 476. Special Problems in Women’s Studies.**
(3-0-3); on demand.
**Prerequisite:** consent of instructor and Women’s Studies director. This course is an independent study in Women’s Studies for the undergraduate Women’s Studies Minor. Each request for the course will be considered on its own merits in relation to the special needs of the student.

**WST 490. Integrative Capstone in Women’s Studies.**
(3-0-3); II.
**Prerequisite:** consent of instructor and Women’s Studies Director. This course is designed to integrate knowledge and understanding of Women’s Studies issues through a mastery of research strategies and creative expressions as applied to the students’ professional goals.
Administrative Directory

Board of Regents
James H. Booth, Lovely
Julie Butcher, Lexington
Paul C. Goodpaster, Morehead
David V. Hawpe, Louisville
Cheryl U. Lewis, Hyden
Glenn Means, Student Regent
John C. Merchant, Cincinnati
Ronald Morrison, Faculty Regent
Patrick E. Price, Flemingsburg
Terry White, Staff Regent

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Michael R. Walters, Treasurer
Carol Johnson, Secretary

Office of the President
Wayne D. Andrews, President
Carol Johnson, Assistant to the President

University Administration
Karla Hughes, Provost and Vice President of Academic Affairs
Beth Patrick, Chief of Staff and Vice President for Planning and Budgets
James Shaw, Vice President for University Advancement
Michael R. Walters, Vice President for Administration & Fiscal Services
Madonna Weathers, Vice President for Student Life
Student Learner Outcomes (SLO)

The purpose of Morehead State University's general education component is to equip all students with the knowledge and skills to live fulfilling and productive lives as educated citizens of the world.

1. Communication Skills

Students will demonstrate ability to:

a. Listen and speak effectively in conversational, small group, public and intercultural contexts
b. Read college-level critical, creative and technical texts for comprehension
c. Write effectively for a variety of target audiences using conventions associated with standard English
d. Convey quantitative and qualitative relationships using symbols, equations, graphs, and tables

2. Intellectual Skills

Students will demonstrate ability to:

a. Employ current technologies to locate, analyze, evaluate and use information in multiple contexts and for a variety of purposes
b. Recognize and effectively utilize both deductive and inductive reasoning
c. Thoughtfully analyze and evaluate diverse points of view
d. Perceive and articulate ethical consequences of decisions and actions
e. Apply knowledge and skills to new settings and complex problems
f. Explore the connections among practical, esoteric, critical and creative thinking

3. Quantitative Skills

Students will demonstrate ability to:

a. Analyze situations and/or problems using arithmetic, geometric, algebraic and statistical methods
b. Use deductive reasoning in a formal, symbolic, axiomatic system
c. Verify answers to mathematical and scientific problems in order to determine reasonableness, identify alternative methods of solution, and select the most reliable results

4. Knowledge of Human Cultures

Students will demonstrate ability to:

a. Examine the history of the United States and explain the basic principles and operation of the United States government with a view to being a responsible citizen
b. Investigate the world view and/or history of cultures outside the United States
c. Analyze cultural, social, economic, geographic and historical dynamics that influence individuals and groups
d. Comprehend the cycle of human growth necessary to provide sustained health and individual well-being

5. Knowledge of the Natural World

Students will demonstrate ability to:

a. Comprehend and apply basic scientific, quantitative, and technological methods and knowledge of natural systems to the solution of scientific problems
b. Employ scientific methods and theories to analyze and address open and debated questions in the sciences
c. Analyze explanations to classify them as scientific or non-scientific

6. Knowledge of Aesthetics

Students will demonstrate ability to:

a. Analyze the significance of diverse creative productions and explain how ideas are communicated effectively through the expressive arts (literature, theatre, dance, music, and visual arts)
b. Describe and analyze the aesthetic value of creative productions in cultural and historical context

Students' Rights in Access to Records

This information is provided to notify all students of Morehead State University of the rights and restrictions regarding inspection and release of student records contained in the Family Educational Rights and Privacy Act of 1974 (Public Law 93-380) as amended.

Definitions

1. "Eligible student" means a student who has attained 18 years of age or is attending an institution of postsecondary education.
2. "Institution of postsecondary education" means an institution which provides education to students beyond the secondary school level.
3. "Secondary school level" means the educational level (not beyond grade 12), at which secondary education is provided, as determined under state law.

I. Students' Rights to Inspection of Records and Review Thereof

1. Any student or former student of Morehead State University has the right to inspect and review any and all "official records, files, and data directly related to" the student. The terms "official records, files, and data" are defined as including, but not limited to:
   a. Identifying data
   b. Academic work completed
   c. Level of achievement (grades, standardized achievement test scores)
   d. Attendance data
   e. Scores on standardized intelligence, aptitude, and psychological tests
   f. Interest inventory results
   g. Family background information
   h. Teacher or counselor ratings and observations
   i. Verified reports of serious or recurrent behavior problems
   j. Cumulative record folder
2. The institution is not required to make available to students confidential letters of recommendation placed in their files before Jan. 1, 1975.
3. Students do not have the right of access to records maintained by the University's law enforcement officials.
4. Students do not have direct access to medical, psychiatric, or similar records which are used solely in connection with treatment purposes. Students are allowed the right to have a
doctor or other qualified professional of their choice inspect their medical records.

5. Procedures have been established by the University for granting the required access to the records within a reasonable time, not to exceed 45 days from the date of the request.

6. The University shall provide students an opportunity for a hearing to challenge the content of their records to ensure that the records are not inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student.
   a. Informal Proceedings: Morehead State University may attempt to settle a dispute with the parent of a student or the eligible student regarding the content of the student’s education records through informal meetings and discussions with the parent or eligible student.
   b. Formal Proceedings: Upon the request of either party (the educational institution, the parent, or eligible student), the right to a hearing is required. If a student, parent, or educational institution requests a hearing, the vice president for student life shall make the necessary arrangements. The hearing will be established according to the procedures delineated by the University.

II. Restrictions on the Release of Student Records

1. Morehead State University will not release records without written consent of the students except to:
   a. Other local educational officials, including teachers of local educational agencies who have legitimate educational interest.
   b. Officials of other schools or school systems in which the student intends to enroll, upon the condition that the student be notified of the transfer and receive a copy of the record desired, and have an opportunity to challenge the contents of the records.
   c. Authorized representatives of the Comptroller General of the United States, the Secretary of Education or an administrative head of an education agency, in connection with an auditor evaluation of federally supported programs; or
   d. Parents of dependent students.

2. Morehead State University will not furnish personal school records to anyone other than the described above unless:
   a. Written consent of the student is secured, specifying the records to be released, the reasons for the release, identifying the recipient of the records, and furnishing copies of the materials to be released to the student; or
   b. The information is furnished in compliance with a judicial order or pursuant to a subpoena, upon condition that the student is notified of all such orders or subpoenas in advance of compliance therewith.

III. Provisions for Students Requesting Access to Records

The student or former student must file a certified and official request in writing to the registrar of the University for each review.

IV. Provisions for Authorized Personnel Requesting Access to Records

1. Authorized personnel must provide positive identification and indicate reasons for each request for examination.

2. Authorized personnel who have legitimate educational interests may review students’ records, showing cause.

3. Other persons must have specific approval in writing from the student for release of information. This approval must specify the limits (if any) of the request.

Who, What, Where?

For a detailed listing of whom to contact for university programs and services, visit the following website:
http://www.moreheadstate.edu/whowhatwhere/

Campus Map

For the campus map, click the following link:
http://www.moreheadstate.edu/campusmap/
# University Academic Calendar

## Fall 2011 Academic Calendar

### August

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Wednesday</td>
<td>Campus-wide convocation; division, college and department meetings</td>
</tr>
<tr>
<td>18</td>
<td>Thursday</td>
<td>Class scheduling in academic departments</td>
</tr>
<tr>
<td>19</td>
<td>Friday</td>
<td>Class scheduling in academic departments. Residence halls open for freshmen to move in</td>
</tr>
<tr>
<td>22</td>
<td>Monday</td>
<td>All on-campus and off-campus classes begin. Late registration fee in effect.</td>
</tr>
<tr>
<td>29</td>
<td>Monday</td>
<td>Last day to:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Register for credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Add a class or change sections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Change from audit to credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Change from credit to audit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Change to pass-fail option</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Change Meal Plan option</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Last day for 100 percent credit of creditable fees (partial or full withdrawal)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Last day to pay account in full or complete an online Protect Class Schedule Plan</td>
</tr>
<tr>
<td>30</td>
<td>Tuesday</td>
<td>Drop of class schedules for students who have not paid in full or completed an online Protect Class Schedule Plan</td>
</tr>
</tbody>
</table>

### September

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Monday</td>
<td>Labor Day (no day or night classes or office hours)</td>
</tr>
<tr>
<td>6</td>
<td>Tuesday</td>
<td>Last day for 75% credit of creditable fees (partial or full withdrawal)</td>
</tr>
<tr>
<td>13</td>
<td>Tuesday</td>
<td>Last day for 50% credit of creditable fees (partial or full withdrawal)</td>
</tr>
<tr>
<td>20</td>
<td>Tuesday</td>
<td>Last day for 25% credit of creditable fees (partial or full withdrawal)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day to drop a first half-semester class with an automatic grade of &quot;W&quot;</td>
</tr>
</tbody>
</table>

### October

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Wednesday</td>
<td>First half-semester classes end</td>
</tr>
<tr>
<td>13</td>
<td>Thursday</td>
<td>Fall Break for students (not faculty or staff)</td>
</tr>
<tr>
<td>14</td>
<td>Friday</td>
<td>Fall Break for students (not faculty or staff)</td>
</tr>
<tr>
<td>17</td>
<td>Monday</td>
<td>Mid-term grade reports due in Registrar's Office by 9 a.m.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Second half-semester classes begin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day to add a second half-semester class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day to apply for Fall 2011 graduation</td>
</tr>
</tbody>
</table>

### November

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tuesday</td>
<td>Last day to drop a full-term class or withdraw from school with an automatic grade of &quot;W&quot;</td>
</tr>
<tr>
<td>9</td>
<td>Wednesday</td>
<td>Advance Registration for Spring 2012</td>
</tr>
<tr>
<td>22</td>
<td>Tuesday</td>
<td>Last day to drop a second-half semester class with an automatic grade of &quot;W&quot;</td>
</tr>
<tr>
<td>23</td>
<td>Wednesday</td>
<td>Thanksgiving Break</td>
</tr>
<tr>
<td>25</td>
<td>Friday</td>
<td>Classes Resume</td>
</tr>
</tbody>
</table>

### December

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Monday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>13</td>
<td>Tuesday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>14</td>
<td>Wednesday</td>
<td>Departmental Activities 8 a.m. to 12:30 p.m. Final Exams begin 12:40 p.m.</td>
</tr>
<tr>
<td>15</td>
<td>Thursday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>16</td>
<td>Friday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>17</td>
<td>Saturday</td>
<td>Fall Commencement</td>
</tr>
<tr>
<td>19</td>
<td>Monday</td>
<td>Grades due in Registrar's Office by 9 a.m.</td>
</tr>
</tbody>
</table>

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University Academic Calendar  301
### Spring 2012 Academic Calendar

#### January

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Monday</td>
<td>Last day to pay in full or complete an online Protect Class Schedule plan</td>
</tr>
<tr>
<td>10</td>
<td>Tuesday</td>
<td>• Late fee in effect&lt;br&gt;• Class schedules dropped for students who have not paid in full or completed an online Protect Class Schedule plan</td>
</tr>
<tr>
<td>11</td>
<td>Wednesday</td>
<td>Campus-wide convocation; division, college and department meetings</td>
</tr>
<tr>
<td>12</td>
<td>Thursday</td>
<td>Class scheduling in academic departments</td>
</tr>
<tr>
<td>13</td>
<td>Friday</td>
<td>Class scheduling in academic departments. Residence halls open for freshmen to move in</td>
</tr>
<tr>
<td>16</td>
<td>Monday</td>
<td>Martin Luther King Jr. Day (no classes or office hours)</td>
</tr>
<tr>
<td>17</td>
<td>Tuesday</td>
<td>All on-campus and off-campus classes begin. Late registration fee in effect.</td>
</tr>
<tr>
<td>24</td>
<td>Tuesday</td>
<td>Last day to:&lt;br&gt;• Register for credit&lt;br&gt;• Add a class or change sections&lt;br&gt;• Change from audit to credit&lt;br&gt;• Change from credit to audit&lt;br&gt;• Change to pass-fail option&lt;br&gt;• Change Meal Plan option&lt;br&gt;• Last day for 100 percent credit of creditable fees (partial or full withdrawal)</td>
</tr>
</tbody>
</table>

#### February

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Tuesday</td>
<td>Last day for 50% credit of creditable fees (partial or full withdrawal)</td>
</tr>
<tr>
<td>14</td>
<td>Tuesday</td>
<td>Last day for 25% credit of creditable fees (partial or full withdrawal)</td>
</tr>
<tr>
<td>15</td>
<td>Wednesday</td>
<td>Last day to drop a first half-semester class with an automatic grade of &quot;W&quot;</td>
</tr>
</tbody>
</table>

#### March

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Friday</td>
<td>First half-semester classes end</td>
</tr>
<tr>
<td>12</td>
<td>Monday</td>
<td>• Mid-term grade reports due in Registrar’s Office by 9 a.m.&lt;br&gt;• Second half-semester classes begin&lt;br&gt;• Last day to add a second half-semester class</td>
</tr>
<tr>
<td>13</td>
<td>Tuesday</td>
<td>Nonpayment fee in effect for student accounts not paid in full</td>
</tr>
<tr>
<td>19</td>
<td>Monday</td>
<td>Spring Break (students)</td>
</tr>
<tr>
<td>23</td>
<td>Friday</td>
<td>Spring Break (students)</td>
</tr>
<tr>
<td>30</td>
<td>Tuesday</td>
<td>Last day to drop a full-term class or withdraw from school with an automatic grade of &quot;W&quot;</td>
</tr>
</tbody>
</table>

#### April

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Friday</td>
<td>Last day to drop a second-half semester class with an automatic grade of &quot;W&quot;</td>
</tr>
<tr>
<td>9</td>
<td>Monday</td>
<td>Advance Registration for Summer and Fall 2012</td>
</tr>
<tr>
<td>13</td>
<td>Friday</td>
<td></td>
</tr>
</tbody>
</table>

#### May

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Monday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>8</td>
<td>Tuesday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>9</td>
<td>Wednesday</td>
<td>Departmental Activities 8:30 a.m. to 12:30 p.m. Final Exams begin 12:40 p.m.</td>
</tr>
<tr>
<td>10</td>
<td>Thursday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>11</td>
<td>Friday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>12</td>
<td>Saturday</td>
<td>Spring Commencement</td>
</tr>
<tr>
<td>15</td>
<td>Tuesday</td>
<td>Grades due in Registrar’s Office by 9 a.m.</td>
</tr>
</tbody>
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