Morehead State University
Undergraduate Catalog 2013-14

Volume 71 August 2013

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 university 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, 301 Howell-McDowell Administration Building, Morehead, KY 40351, 606-783-2097 or emailed to: affirmativeaction@moreheadstate.edu.

Printing

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Academic Calendars

Fall 2013 Academic Calendar

August
14 Wednesday - Campus-wide convocation; division, college and department meetings
15 Thursday - Class scheduling in academic departments
16 Friday - Class scheduling in academic departments
19 Monday - All on-campus and off-campus classes begin. Late fee in effect.
26 Monday - Last day to:
  - Register for credit, add a class or change sections
  - Change from audit to credit, credit to audit, or pass-fail option
27 Tuesday - Class schedules dropped for students who have not paid in full or completed an online Protect Class Schedule plan

September
2 Monday - Labor Day (University closed)
3 Tuesday - Last day for 75 percent refund
10 Tuesday - Last day for 50 percent credit of creditable fees (partial or full withdrawal)
17 Tuesday - Last day for 25 percent credit of creditable fees (partial or full withdrawal)
18 Monday - Last day to drop a second half-semester class with an automatic grade of "W"
27 Wednesday - Thanksgiving Break (University closed)

October
9 Wednesday - First half-semester classes end
10 Thursday - Fall Break (students only)
11 Friday - Mid-term grade reports due in Registrar's Office by 9 a.m.
14 Monday - Second half-semester classes begin
15 Tuesday - Last day to add a second half-semester class

November
1 Friday - Last day to drop a full-term course or withdraw from school with an automatic grade of "W"

December
2 Monday - Classes resume
9 Monday - Final Examinations
10 Tuesday - Departmental activities 8 a.m. to 12:30 p.m. Final Exams begin 12:45 p.m.
12 Thursday - Final Examinations
13 Friday - Commencement 10:30 a.m.
17 Tuesday - Grades due in Registrar's Office by 9 a.m.
20 Friday - Winter leave begins
Spring 2014 Academic Calendar

January
2  Thursday -University offices open
8  Wednesday -Campus-wide Convocation; division, college and department meetings
9  Thursday -Class scheduling in academic departments
10 Friday -All on-campus and off-campus classes begin
13 Monday -Late fee in effect
20 Monday -Martin Luther King Jr. Day (University closed)
21 Tuesday -Last day to:
   • Register for credit
   • Add a class or change sections
   • Change from audit to credit, credit to audit, or to a pass-fail option
   -Last day for 100 percent credit of creditable fees (partial or full withdrawal)
   -Last day to pay account in full or completion of an online Protect Class Schedule Plan
22 Wednesday -Class schedules dropped for students who have not paid in full or completed an online Protect Class Schedule plan
28 Tuesday -Last day for 75% credit of creditable fees (partial or full withdrawal)
29 Wednesday -Final drop of class schedules for students who have not paid in full or completed an Online Protect Class Schedule plan

February
4  Tuesday -Last day for 50 percent credit of creditable fees (partial or full withdrawal)
11 Tuesday -Last day for 25 percent credit of creditable fees (partial or full withdrawal)
19 Wednesday -Last day to withdraw from a first half-semester class with an automatic grade of "W"

March
7  Friday -First half-semester classes end
10 Monday -Mid-term grade reports due in Registrar’s Office by 9:00 a.m.
           -Second half-semester classes begin
           -Last day to add a second half-semester class
14 Friday -Last day to apply for Spring 2014 graduation without penalty
17 - Monday - Spring Break (students and faculty)
21 Friday
31 Monday -Last day to drop a full-term course or withdraw from school with automatic grade of "W"

April
2 - Wednesday - Advance Registration for Fall 2014
15 Tuesday -Last day to drop a second half-semester class with a grade of "W"
4  Friday

May
5  Monday -Final Examinations
6  Tuesday
7  Wednesday -Departmental activities 8:30 a.m. through 12:30 p.m.
           -Final Exams begin at 12:45 p.m.
8  Thursday -Final Examinations
9  Friday
10 Saturday -Commencement 10 a.m. and 2 p.m.
13 Tuesday -Grades due in Registrar's Office by 9 a.m.
Accreditations and Memberships

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.

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
- Servicemembers Opportunity Colleges (SOC) Consortium Member
- Southern Regional Education Board
About the University

With a Fall 2012 coeducational enrollment of 11,172 undergraduate and graduate students and a full-time teaching faculty of 370, Morehead State University offers many undergraduate degree programs and 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.

Aspire to Greatness: MSU Strategic Plan

For more than a century, Morehead State University has improved the lives and livelihoods of Kentucky citizens through its public regional university mission of instruction, research and service. As the 21st century progresses with new challenges facing the state and the nation, MSU has set an aggressive agenda based on a shared vision of becoming the best public regional university in the South.

This strategic plan, ASPIRE to Greatness, was developed as an institution-leading document for Morehead State University through the year 2014. It will serve as a foundation for prioritizing actions and allocating resources to support progress toward achieving the six primary strategic goals and other intended outcomes. The goals, supporting objectives, and key measures of performance identified in the plan will help guide us toward achieving our shared vision while also sustaining the Commonwealth’s goals for statewide improvements in postsecondary education.

Collective and individual participation in the planning process by members of the MSU Board of Regents, faculty, administration, staff, students, alumni and other friends of the University have resulted in this strategic document. That collaboration is reflective of both the historic strength and promising future of the University.

Wayne D. Andrews
President
(Adopted by the Morehead State University Board of Regents, June 2010)

Strategic Goals

- **Academic Excellence**
  How will we develop, deliver and maintain superior academic programs?

- **Student Success**
  How will we fulfill student academic support and co-curricular needs?

- **Productive Partnerships**
  How will we utilize partnerships to benefit the people, communities and economy within East Kentucky?

- **Improved Infrastructure**
  How will we effectively manage human, capital and fiscal resources?

- **Resource Enhancement**
  How will we generate public and private revenues necessary to fund institutional priorities?

- **Enrollment and Retention**
  How will we reach optimal student enrollment and retention goals?

Mission, Essential Characteristics and Core Values

Mission Statement

As a 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.

Essential Characteristics of an MSU Educational Experience

- Excellent undergraduate programs in liberal arts, sciences and professional programs
- High quality graduate programs in selected areas
- Strong commitment to student access, affordability and safety
- Personalized environment with quality faculty as mentors and teachers
- Strong commitment to engage undergraduate students in faculty research, outreach and service opportunities
- Support for diverse arts and cultural programs
- Strong commitment to a quality enhancement plan that focuses on improvements in communication and critical thinking
- Resolute commitment to fostering a campus culture that cultivates and celebrates diversity
- High placement rates of students applying to professional programs
- A learning environment supported with robust technology
- Strong commitment to co-curricular activities that provide recreational opportunities, learning opportunities, and contribute to student development
- Support for NCAA Division I intercollegiate athletic programs
- Strong commitment to health and wellness programs for students, faculty and staff
- Strong commitment to community partnerships that provide learning opportunities for students, faculty and staff

Core Values

We strive 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.
Campus Map and Buildings Abbreviations
Visit the following link for a campus map and complete listing of buildings abbreviations: www.moreheadstate.edu/campusmap.

Family Educational Rights and Privacy Act (FERPA)
Release of directory information:
Under the Family Educational Rights and Privacy Act (Public Law 93-380), "directory information" means information contained in an education record of a student that would not generally be considered harmful or an invasion of privacy if disclosed. It includes the student's name; address; telephone listing; electronic mail address; major field of study; dates of attendance; enrollment status (e.g., undergraduate or graduate, full-time or part-time); participation in officially recognized activities and sports; weight and height of members of athletic teams; degrees, honors and awards received; and the most recent educational agency or institution attended. The release of the above-noted information by an educational agency or institution is permitted under the law unless the student notifies the institution or agency in writing that he/she does not want such information released.

Who, What, Where?
For a detailed listing of whom to contact for University programs and services, visit www.moreheadstate.edu/whowhatwhere.
## Programs of Study

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<td>Regional Analysis and Public Policy Minor</td>
<td>BA</td>
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<tr>
<td>Religious Studies</td>
<td>BA</td>
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<tr>
<th>Program</th>
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<tbody>
<tr>
<td>Respiratory Care</td>
<td>AAS</td>
<td>Associate</td>
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<tr>
<td>Secondary Education</td>
<td>BA</td>
<td>Area, Major, Minor</td>
</tr>
<tr>
<td>Social Studies with Teacher Certification</td>
<td>BA</td>
<td>Area, Major, Minor</td>
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<tbody>
<tr>
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<tr>
<td>Sociology</td>
<td>BA</td>
<td>Major, Minor</td>
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<tr>
<td>Space Science</td>
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<tbody>
<tr>
<td>Spanish with Teacher Certification (P-12)</td>
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<tr>
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<td>Early Elementary (P-5) and LBD</td>
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<tr>
<td>Sport Management</td>
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<tbody>
<tr>
<td>Strategic Communication and Leadership minor</td>
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<tbody>
<tr>
<td>Studio Art Minor</td>
<td>BA</td>
<td>Minor</td>
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<tr>
<td>Technology Management (Completer Program)</td>
<td>BS</td>
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<tr>
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<tbody>
<tr>
<td>Theatre</td>
<td>BA</td>
<td>Major, Minor</td>
</tr>
<tr>
<td>Theatre with Teacher Certification (P-12)</td>
<td>BA</td>
<td>Major, Minor</td>
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<tr>
<th>Program</th>
<th>Degree Type</th>
<th>Notes</th>
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<tr>
<td>Traditional Music Studies</td>
<td>BA</td>
<td>Major, Minor</td>
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<tr>
<td>University Studies</td>
<td>BUS, AA</td>
<td>Area</td>
</tr>
<tr>
<td>Veterinary Science</td>
<td>BS</td>
<td>Area</td>
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<tr>
<th>Program</th>
<th>Degree Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterinary Technology</td>
<td>BS, AAS</td>
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<thead>
<tr>
<th>Program</th>
<th>Degree Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Communication Minor</td>
<td>BS</td>
<td>Minor</td>
</tr>
</tbody>
</table>
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: my.moreheadstate.edu/.

The following information can be accessed through the MyMoreheadState portal:

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

Email and Online Courses
Access your MSU email account as well as Blackboard, which serves as the online course delivery system.

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

Admission

The admission of all undergraduate students to 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.

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 and 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 fall 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 "Probation" in certain circumstances. Students on pro-
bation must have at least a 2.0 GPA in subsequent semesters and meet University requirements for satisfactory academic progress. Students admitted with conditions of successfully completing the Provisional Studies Program within the appropriate time frame, 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).

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 results; (3) a high school transcript (and a final transcript after high school graduation); and (4) a one-time $30 undergraduate application processing 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 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 Academic Advising and Retention in University College. 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 Academic Advising and Retention in University College. Students who do 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, and any student with a GPA lower than 2.0 on a 4.0 scale may be considered for probationary admission.

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 processing 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 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. Students should con-
sult their 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.

For more detailed information regarding the transfer policy for both regionally and non-regionally accredited colleges, visit UAR 100 at the following link:
www.moreheadstate.edu/files/units/daa/uar.

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 processing 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 processing fee of $30 if the fee has not been paid previously, to be readmitted to the University; (2) official verification of financial resources; and (5) a one-time $30 undergraduate application processing 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 sub-scores 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 processing 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, email: 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).

Social Studies (three credits required)

Health (one half credit required)

Physical Education (one half credit required)

History and Appreciation of Visual, Performing Arts (one-credit required)

Recommended strongly: one or more courses that develop computer literacy.

Foreign Language (two credits required in same language or demonstrated competency)

Electives (five credits required, **five rigorous)
Recommended strongly: one or more courses that develop computer literacy.

Total Credits: 22 (17 required credits; five-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
Exclusions 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 sub-scores 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 before the first day of classes. Information about placement testing is available through the MSU Testing Center, 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. Not drop developmental courses without the approval of both the advisor and University College.
4. Be aware that 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.

For more information, visit the Developmental Education website: www.moreheadstate.edu/developmentaleducation.

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 processing 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 processing 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 processing 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 Application to the Early College Office.

The application must include the student’s high school GPA and ACT or ACT Plan scores. Students must have a minimum ACT composite score of 18 and a high school GPA of 3.0 to be admitted unconditionally to the Early College program. Area sub-scores 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 questions to the Early College office or to your high school guidance counselor.

Graduates of Noncertified, Nonpublic Schools  
(Including Home Schools)

Students who are graduates of noncertified, nonpublic schools, including home-schooled students, must submit MSU’s Undergraduate Admissions and Scholarship Application, an official transcript, a one-time $30 undergraduate application processing fee and provide ACT/SAT scores. In some cases, a review of the student’s courses may be required.

Admission will be considered according to the same procedures as applicants from accredited high schools.

Dual Admission

Students at participating Kentucky community and technical colleges can be admitted to Morehead State University while attending the community and technical college. Students need to only apply for admission once. Interested students may contact the admission office at the community college and request that their admissions information be forwarded to Admissions in Enrollment Services at Morehead State University. Participating students are assigned an academic advisor at the University. Students will be locked into a catalog year for an academic program, subject to changes in program requirements. MSU cannot be responsible for guaranteed transferability when curricular changes are made by agencies outside the University. Students must have a minimum 2.0 GPA and at least 24 semester hours of transferable credit or they may be subject to the Kentucky Pre-College Curriculum.

Students who do not meet the above criteria will be considered on an individual basis. Also, students may need to take the ACT for admission to certain programs at the University. Participating community colleges include Ashland Community and Technical College, Big Sandy Community and Technical College, Hazard Community and Technical College, Maysville Community and Technical College and Southeast Community and Technical College. For more information, contact Enrollment Services at 606-783-2000 at MSU or the admissions offices at the participating community and technical colleges.

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) 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 to 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 the Office of Enrollment Services. The application and policy is available at www.moreheadstate.edu/finaidforms.

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 the Office of 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.

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, Grot Thompson Hall, Morehead, KY 40351, telephone 606-783-2060, fax 606-783-5062, or online at www.moreheadstate.edu/housing.

Tuition and Fee Information

How to Pay Tuition and Fees

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.

14 Admission, Fees, Financial Aid and Housing
How to Pay Tuition and Fees

1. Login to MyMoreheadState at my.moreheadstate.edu.
2. Select the "Finance" icon, and then select "My Billing Info" to pay via ACH, credit card or debit card.
3. Mail payment to Morehead State University, Office of Accounting and Financial Services, 207 Howell McDowell Administration Building, Morehead, KY 40351.
4. Pay bill at any regional campus (Ashland, Mt. Sterling, Prestonsburg or West Liberty).

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 MSU EagleMail account 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 15 for fall semesters) by logging into MyMoreheadState via my.moreheadstate.edu and selecting the "Finance" icon and then 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 his or her 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/aafs or calling 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.

Protect Class Schedule Plans

Morehead State University offers two "Protect Class Schedule" plans:

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. It also protects class schedules for students with some financial aid, scholarships, waivers, etc. who can pay the remaining 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 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 outstanding balances and to avoid a hold being placed on their account.

Credit/Adjustments

Students withdrawing from school during any semester or term must arrange for their withdrawal with the Office of the Registrar. No credit 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 minimum 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. Credit/adjustment periods and amounts are as follows:

Refund Policy

The following credit/adjustment policy is applicable for all students:

Fall or Spring Session Credit Adjustments

<table>
<thead>
<tr>
<th>Adjustment Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>first six days of classes</td>
<td>100 percent</td>
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<tr>
<td>next five days of classes</td>
<td>75 percent</td>
</tr>
<tr>
<td>next five days of classes</td>
<td>50 percent</td>
</tr>
<tr>
<td>next five days of classes</td>
<td>25 percent</td>
</tr>
</tbody>
</table>

No credits are given after the first 21 class days of the semester.

Summer I and Summer II Sessions (Four-week sessions)

<table>
<thead>
<tr>
<th>Adjustment Period</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>first two days of classes</td>
<td>100 percent</td>
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<tr>
<td>next two days of classes</td>
<td>75 percent</td>
</tr>
<tr>
<td>next two days of classes</td>
<td>50 percent</td>
</tr>
<tr>
<td>next two days of classes</td>
<td>25 percent</td>
</tr>
</tbody>
</table>

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

Summer Intersession (Two-week session)

<table>
<thead>
<tr>
<th>Adjustment Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>first two days of classes</td>
<td>100 percent</td>
</tr>
<tr>
<td>next one day of classes</td>
<td>75 percent</td>
</tr>
<tr>
<td>next one day of classes</td>
<td>50 percent</td>
</tr>
<tr>
<td>next one day of classes</td>
<td>25 percent</td>
</tr>
</tbody>
</table>
No credits are given after the first five class days of the session.

Summer Session (Eight-week session)
- first four days of classes: 100 percent
- next two days of classes: 75 percent
- next two days of classes: 50 percent
- next two days of classes: 25 percent

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.

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 the "WebAdvisor" icon, then 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.

Financial Aid 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). Students 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 eligibility requirements for aid. Financial assistance is granted, depending on the availability of funds, to all eligible students regardless of sex, race, color, or ethnic origin. About 90 percent 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 contribution of the student and/or parents toward educational expenses.

Students apply for financial aid by completing the FAFSA online at www.fafsa.ed.gov. Applying early increases the chance of receiving financial aid. Most financial aid is credited to students' accounts, one-half of the year's award 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, including federal, state, private and/or institutional aid, cannot exceed MSU's established "cost of attendance" for any given year. Students who receive more than the amount for which they are eligible 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 maximum needs have been met before applying other aid programs.
2. Make sure all information reported on the FAFSA is correct.
3. Notify the Office of Enrollment Services of aid received from sources other than the Office of Enrollment Services.

Veteran's Benefits

Applying for Veteran's Education Benefits
Eligible veterans (G.I. Bill) and/or eligible children, wives and spouses of veterans who died or were permanently and totally disabled as the result of service in U.S. Armed Forces (V.A. benefits program) may apply for education benefits. Eligibility is determined by the V.A. For information and application forms, contact Veterans Administration Regional Office, P.O. Box 66830, St. Louis, MO 63166-6830, telephone toll free 1-888-442-4551 or apply for benefits at http://www.gibill.va.gov.

For additional information, contact Joey Bryant, School Certifying Official, in the Office of the Registrar, Ginger Hall 201, 606-783-2878 or by email: rjbryant@moreheadstate.edu

Eligibility for Veteran's Benefits
You are eligible for benefits if your military service places you in one of the following chapters:
- Chapter 30 — Montgomery G.I. Bill for active duty veterans.
- Chapter 31 — Vocational rehabilitation benefits for disabled veterans.
- Chapter 33 — Post 9/11 G.I. Bill for active duty veterans, implemented August 1, 2009.
- Chapter 1606 — Provides benefits to students participating in the National Guard and/or Reserves.
- Chapter 1607 — Educational assistance for reserve component members supporting contingency operations and certain other operations. Also referred to as REAP.

LTC Alan R. Baldwin Veterans Center
The LTC Alan R. Baldwin Veterans Center, located in 304 Breckinridge Hall, was established to build on the University’s continued efforts of providing MSU’s military and veteran students with the service, support and assistance they have earned. The goal is to eliminate obstacles and ensure that our veterans transition to college with greater ease.

The center will assist prospective and current student veterans by providing counseling and direction on all educational benefits, as well as enrollment and registration assistance, counseling resources and referrals, and academic and career assistance. In addition, the center may be used for student veterans to study, relax and reconnect with their fellow student veterans.

The center will be open Monday-Friday, from 8 a.m. until 4:30 p.m. It is equipped with study tables, computer, refrigerator, microwave, couches, recliners and a flat-screen television. The center
is also an approved study area for provisional veteran students on academic probation. For more information on the LTC Alan R. Baldwin Veterans Center, contact Jill McBride, Student Veteran Advocate, j.mcbride@moreheadstate.edu, 606-783-5226 or Joey Bryant, Veterans Certifying Official, rjbryant@moreheadstate.edu, 606-783-2878.

Military Credit

As a Servicemembers Opportunity College (SOC), Morehead State University awards military credits in accordance with SOC and American Council on Education (ACE) guidelines. Therefore, military credit will be awarded after careful analysis by academic departments to determine the comparability of the learning outcomes of the military course and the course at the University for which credit is being sought.

Military Occupational Specialty and Other Military Credit

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, and an equivalency list will be 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.

Servicemembers Opportunity College

MSU has been designated a Servicemembers Opportunity College (SOC) and awards military credit in accordance with SOC and American Council on Education (ACE) guidelines. For more information, contact the Office of the Registrar at 606-783-2008.

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 67 percent of the credit hours attempted. Successful completion for this purpose is defined as receiving a grade of "D" or better.
2. Students must have a cumulative GPA of 2.0 or higher by the end of the second year (four semesters) and each evaluation period thereafter.
3. A student has attempted no more than 150 percent of the number of hours required for their 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.
4. 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.
5. If otherwise eligible, students will be given financial aid during a term in which they may be repeating a course. Financial aid can pay for the repeat of a passed course only one time.
6. 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 form. Copies of the appeals form may be obtained in the Office of Enrollment Services or online at www.moreheadstate.edu/finaidforms. 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 by enrolling 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 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 at www.fafsa.ed.gov.

- **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 JobLink at www.moreheadstate.edu/finaid.

- **Federal Work-Study Program (FWSP).** 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.

Loans. Loans must be repaid, and are available in differing amounts and under varying conditions. Types are Federal Perkins Loan, Federal Direct Loan, Federal Direct Plus Loan, and the Emergency Loan Fund.

- **Federal Perkins Loan.** A federally-subsidized program based on financial need and available funds.
- **Federal Direct Stafford Loan.** Allows students to borrow money directly through the institution. These loans may be need based (subsidized) or non-need based (unsubsidized). Students must be enrolled in at least six credit hours.
- **Federal Direct PLUS Loan.** Allows parents and/or stepparents of dependent undergraduate students to borrow money for student educational expenses.
- **Emergency Loan Fund.** Administered by Financial Aid, this fund assists students in emergency situations. Students may borrow small amounts on a short-term, no-interest basis, depending on funds available. Apply in person to Financial Aid in the Office of Enrollment Services.

Entitlements. Entitlement programs include Veterans Administration Educational Assistance G.I. Bill and benefits for veterans' dependents, tuition waiver for dependents of Kentucky veterans, and Vocational Rehabilitation Assistance.

- **Veterans Administration (V.A.) Educational Assistance.** Eligible veterans (G.I. Bill) and/or eligible children, wives and spouses of veterans who died or were permanently and totally disabled as the result of service in U.S. Armed Forces (V.A. benefits program) may apply for education benefits. Eligibility is determined by the V.A. For information and application forms, contact Veterans Administration Regional Office, P.O. Box 66830, St. Louis, MO 63166-6830, telephone (toll-free) 1-888-442-4551 or apply at www.gibill.va.gov.

- **Tuition Waiver for Dependents of Kentucky Veterans, Police Officers, Firefighters or Volunteer Firefighters.** A waiver of tuition for eligible dependents (children, spouses, widows) of totally disabled or deceased Kentucky war veterans, police officers, firefighters or volunteer firefighters, who died or were permanently and totally disabled as a result of services in the U.S. Armed Forces, Kentucky law enforcement agencies, as a firefighter, or volunteer firefighter. For information, call the Office of Enrollment Services at 606-783-2000.

- **Vocational Rehabilitation.** Eligible individuals with physical or emotional disabilities may qualify for education benefits. Eligibility is determined by the Vocational Rehabilitation Service in the student's community. Students already enrolled at the University should contact the Vocational Rehabilitation Office, 200-32 South, #4, Morehead, KY 40351, telephone 606-783-1527.

- **Army Reserve Officers' Training Corps Subsistence Allowance.** Eligible individuals enrolled in advanced military science classes may qualify for education benefits that consists of a tax-free allowance of $300-$500 per school month. Contact the Professor of Military Science, MSU, 306 Button Auditorium, Morehead, KY 40351, telephone 606-783-2050.

For additional information pertaining to all financial aid programs, visit: www.moreheadstate.edu/finaid.

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 average cost 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 the Office of 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** 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 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  
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  
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 tracks within certain degree programs by referring to the catalog page number of the general subject area.

General Academic Information

Program Evaluations

Students should review their official program evaluation online or obtain a copy via their MyMoreheadState account at 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.

General Education Program

The General Education Program provides a foundation of knowledge and skills vital for any all students. 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.

I. Required Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</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>Oral Communications (100-level) — three hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMS 108</td>
<td>Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>Math Reasoning (100-level) — three hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 131</td>
<td>Mathematical Reasoning and Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>MATH 135</td>
<td>Mathematics for Technical Students</td>
<td></td>
</tr>
<tr>
<td>MATH 152</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 174</td>
<td>Pre-Calculus Mathematics</td>
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</tr>
<tr>
<td>MATH 175</td>
<td>Calculus I</td>
<td></td>
</tr>
</tbody>
</table>

II. Distribution Requirements

For the 2013-14 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.

HUM I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 160</td>
<td>Understanding the Visual Arts</td>
</tr>
<tr>
<td>ART 263</td>
<td>World Arts</td>
</tr>
<tr>
<td>CVM 210</td>
<td>Media Literacy</td>
</tr>
<tr>
<td>ENG 120</td>
<td>Approaches to Literature</td>
</tr>
<tr>
<td>FLM 170</td>
<td>Introduction to Film (Interdisciplinary)</td>
</tr>
<tr>
<td>HON 205</td>
<td>IDC Honors Core II: The Medieval World (Interdisciplinary)</td>
</tr>
<tr>
<td>HUM 203</td>
<td>Introduction to Medieval Culture (Interdisciplinary)</td>
</tr>
<tr>
<td>MUSH 261</td>
<td>Global Music Experience (Interdisciplinary)</td>
</tr>
<tr>
<td>MUSH 270</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>THEA 110</td>
<td>Introduction to the Theatre</td>
</tr>
</tbody>
</table>

HUM II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 290</td>
<td>Conflict and Communication</td>
</tr>
<tr>
<td>ENG 205</td>
<td>Language: Culture and Mind</td>
</tr>
<tr>
<td>FRN 101</td>
<td>Beginning French I</td>
</tr>
<tr>
<td>GOVT 180</td>
<td>Introduction to Political Theory</td>
</tr>
<tr>
<td>HST 110</td>
<td>World History since 1945</td>
</tr>
<tr>
<td>HST 111</td>
<td>World History through Film</td>
</tr>
<tr>
<td>PHIL 106</td>
<td>Beginning Logic</td>
</tr>
<tr>
<td>SPA 101</td>
<td>Spanish Language and Culture I</td>
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</tbody>
</table>

SBS I

<table>
<thead>
<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>COMS 250</td>
<td>Intro to Intercultural Communication</td>
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<tr>
<td>FIN 264</td>
<td>Personal Finance</td>
</tr>
<tr>
<td>GOVT 141</td>
<td>United States Government</td>
</tr>
<tr>
<td>GOVT 262</td>
<td>U.S. Foreign Policy</td>
</tr>
<tr>
<td>HST 105</td>
<td>U.S. History since 1945</td>
</tr>
<tr>
<td>HUM 250</td>
<td>American and Global Citizenship</td>
</tr>
<tr>
<td>IET 101</td>
<td>Social Dimensions of Technology</td>
</tr>
<tr>
<td>MKT 200</td>
<td>The ABC’s of Marketing</td>
</tr>
<tr>
<td>MNGT 101</td>
<td>Reel Business (Interdisciplinary)</td>
</tr>
<tr>
<td>PLS 200</td>
<td>Law and Individual Rights</td>
</tr>
<tr>
<td>RAPP 101</td>
<td>Introduction to Public Policy</td>
</tr>
<tr>
<td>SOC 203</td>
<td>American Social Problems</td>
</tr>
</tbody>
</table>
### SBS II
- AGR 185 — Current Food and Energy Issues
- APS 201 — Introduction to Appalachia (Interdisciplinary)
- ECON 101 — Introduction to Economics
- FIN 160 — Money: A Cultural Exchange
- GEO 100 — The Human World
- GOVT 102 — Introduction to Politics
- HLTH 151 — Wellness: Theory to Action
- HON 210 — IDC Core III: The Renaissance World (Interdisciplinary)
- IET 200 — Technology and Society
- IST 101 — Introduction to International Studies (Interdisciplinary)
- PSY 154 — Introduction to Psychology
- RAPP 203 — Society, Nature, and Development
- SOC 101 — Introduction to Sociology
- WST 273 — Introduction to Women’s Studies (Interdisciplinary)

### NSC I
- BIOL 105 — Biology for Your Life
- IET 201 — Technology and Life Sciences
- MATH 125 — Introduction to Biostatistics
- NUTR 101 — Nutrition and Well Being
- PSY 121 — Introduction to Brain and Behavior
- RAPP 289 — Regional Natural History

### NSC II
- ASTR 105 — Your Cosmic Context (Interdisciplinary)
- ASTR 112 — Introductory Astronomy
- ESS 102 — Dangerous Planet
- GEO 103 — Physical Geography
- GEO 245 — Natural Landscapes of Appalachia
- HON 215 — IDC Core IV: The Modern World (Interdisciplinary)
- PHYS 109 — History of the Universe
- RAPP 202 — Basic Computer Techniques in Regional Analysis
- SCI 104 — Modern Issues and Problems in Physical Sciences
- SCI/IET/PHYS/SSE 123 — Concepts/Experiences in Energy (Interdisciplinary)

### 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
- BBA 499C — Strategic Management
- BIOL 499C — Contemporary Environmental Issues
- BIOL 499D — Principles of Evolution
- BIOL 499E — Current Issues in Biomedical Science
- BIS 499C — Methods of Teaching Business and Information Technology Education
- CHEM 499C — Chemistry Senior Project I
- CHEM 499D — Chemistry Senior Project II
- COMS 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
- EDEM 499C — Seminar in Effective Teaching
- ENG 499C — Senior Seminar in English
- ESS 499C — ESS Senior Thesis
- ESS 499D — C and I Action Research in ESS
- FRN 499C — Senior Colloquium in French
- GOVT 499C — Senior Seminar
- HLTH 499C — Senior Seminar in Health Promotion
- HPE 499C — Senior Seminar in HPE
- HST 499C — Senior Seminar in History
- HST 499D — Teaching Social Studies
- 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
- MSU 499C — Senior Seminar
- MUSP 499C — Senior Recital
- MUSW 499C — Senior Project
- NURB 499C — Advanced Nursing Practicum
- PHED 499D — Senior Capstone in Exercise Science
- 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

### Note: 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.

### 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

Through general education, students:
a. Speak effectively in conversational, small group, public or intercultural contexts.
b. Read college-level texts for comprehension.
c. Write effectively for a variety of target audiences using conventions associated with standard English.
d. Convey relationships using two or more of the following: equations, graphs, tables, maps and diagrams.

2. Intellectual Skills
Through general education, students:

a. Employ current research technologies in the process of locating, analyzing, evaluating and using information.
b. Effectively utilize deductive or inductive reasoning.
c. Analyze or evaluate diverse points of view.
d. Articulate ethical consequences of decisions or actions.
e. Apply knowledge and skills to new settings.

3. Quantitative Skills
Through general education, students:

a. Analyze problems using arithmetic, geometric, algebraic or statistical methods.
b. Use deductive reasoning in a formal, symbolic, axiomatic system.
c. Verify answers to mathematical or scientific problems.

4. Knowledge of Human Cultures
Through general education, students:

a. Investigate the history of the basic principles or operations of the United States government with a view to being a responsible citizen.
b. Investigate the world view of societies outside the United States.
c. Analyze historical processes that influence individuals or groups.
d. Demonstrate the knowledge necessary to make choices that promote sustained health and well-being.

5. Knowledge of the Natural World
Through general education, students:

a. Classify statements as scientific or nonscientific.
b. Apply scientific or technological concepts to solving problems of natural systems.
c. Employ a scientific approach to analyze scientific questions.

6. Knowledge of Aesthetics
Through general education, students:

a. Discuss how ideas are communicated through the expressive arts; e.g., literature, theatre, dance, music or visual arts.
b. Analyze the aesthetic value of creative productions in a cultural or historical context.

Applying for Graduation

An application for undergraduate degree can be obtained in the Office of the Registrar, 201 Ginger Hall or by calling 606-783-2008. The undergraduate application should be submitted to the Office of the Registrar by March 15 for spring and summer completion or October 15 for fall completion. For more information, visit www.moreheadstate.edu/registrar.

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. Listed 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 or major and minor requirements. (See academic programs for specific GPA requirements.)
3. Complete an area 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 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 must be credit earned at MSU. Exceptions may be made with permission of the dean of the college in which the major or area 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 year 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 addi-
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 a bachelor’s degree.
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; however, the student must complete an additional course in SBS I or SBS II to meet general education requirements.

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

Bachelor of University Studies Degree Requirements

A major, minor or area 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 visit University College, 321 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 a bachelor’s degree.
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; however, the student must complete an additional course in SBS I or SBS II to meet general education requirements.

Note: Credit earned 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 - Professional Studies Track 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 (AA) 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 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 Morehead campus.

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 GPA of 2.0 for all classes taken.
- Apply and be accepted to MSU.

Because of 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. However, the student must complete an additional course in SBS I or SBS II to meet general education 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/ps.

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 EKU Corbin, EKU Manchester or University Center of the Mountains in a rotating format. Students may take classes online, via 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 Morehead campus.

To view the Course Term Plan rotation for MSU and EKU, visit www.moreheadstate.edu/MSU-EKU_PScourses.
To Apply
1. Complete Application for EKU + MSU Collaborative Program (which is separate from our Admissions/Scholarship Application). To view the application, visit www.moreheadstate.edu/MSU-EKU_PSapply.
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. At least a 2.0 GPA or above and completion of your associate degree is required.

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 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:

General Education Courses - Associate Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYS 101 — First Year Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Writing I (100-level)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 100 — Writing I or HON 200</td>
<td>3</td>
</tr>
<tr>
<td>Writing II (200-level)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 200 — Writing II or HON 200 — Ancient World</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communications (100-level)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 108 — Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>Math Reasoning (100-level)</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one course from the following:

MATH 131 — Mathematical Reasoning and Problem Solving
MATH 135 — Mathematics for Technical Students
MATH 152 — College Algebra
MATH 174 — Pre-Calculus or
MATH 175 — Calculus I

**Total** 15

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) For more information, see your advisor or visit University College, 331 Allie Young Hall, 606-783-2084.

Dual Program Completion
Students can now count courses across disciplines (also known as "double-dipping") in order to satisfy program requirements for dual majors or a major and a minor. General Education courses are not included in the dual program completion policy.

Completion of Two Bachelor’s Degrees Simultaneously
Students who wish to receive two bachelor’s degrees simultaneously must satisfactorily complete the regularly prescribed requirements of both degree programs. The degree program that a student is admitted to first will be the first degree. A minimum of 32 new credit hours in residence for the second degree must be completed (e.g., if the first degree requires 120 semester hours, a total of 152 hours must be completed). No more than two bachelor’s degrees may be awarded simultaneously. Final approval of both degree programs must be obtained from each of the appropriate departments and college(s).

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. For more detailed information regarding the specific guidelines regarding this policy, visit UAR 111 at www.moreheadstate.edu/files/units/daa/uar/uar111-01.pdf.

Project Graduate
Project Graduate is a state-wide collaborative effort between The Council on Post-Secondary Education (CPE) and other Kentucky campuses to provide returning students with more than 80-credit hours help in finishing their degree. Students who qualify for Project Graduate are eligible for incentives such as:

- Free application
- Tuition assistance
- Priority enrollment
- Individual advising

For more information on completing your degree through Project Graduate, contact Jill McBride, Project Graduate Liaison, at j.mcbride@moreheadstate.edu or 606-783-5226.

Distance Education and Regional Campus System

Distance Education
Morehead State University offers numerous distance education classes, through advanced technology, to students in the region. Students earn credit toward a degree by interacting with their peers and professors through interactive compressed video (ITV) and Internet classes. For more information on the courses
available through distance education, contact the Office of Distance Education, 312 Allie Young Hall, 606-783-2605 or 800-585-6781, option # 3.

Regional Campus System
Morehead State University maintains a system of five regional campus centers in Ashland, Mt. Sterling, Prestonsburg and West Liberty. Courses are also offered at the University Center of the Mountains, Hazard for the purpose of providing higher education access to place-bound and time-bound students who are geographically remote from the Morehead campus.

MSU at Ashland
1400 College Drive, Suite L 272
Ashland, KY 41101
606-783-2901; 606-327-1777 or toll free at 800-648-5370
www.moreheadstate.edu/ashland
Bachelor of Arts - Area in Early Elementary (P-5)
Bachelor of Arts - Area in Middle Grades (5-9)
Bachelor of Arts - Area in Learning and Behavioral Disorders and Middle Grades (5-9)
Bachelor of Social Work
Bachelor of University Studies
Bachelor of University Studies - Professional Studies Track
Minor in Psychology

MSU at Mt. Sterling
Clay Community Center
3400 Indian Mound Drive
Mt. Sterling, KY 40353
606-783-2078; 859-499-0780 or toll free at 866-870-0809
www.moreheadstate.edu/mtsterling
Associate of Arts (AA) - University Studies
Bachelor of University Studies
Bachelor of Social Work
Associate of Applied Science (AAS) - Nursing

MSU at Prestonsburg
6 Bert Combs Drive
Prestonsburg, KY 41653
606-783-5421; 606-886-2405 or toll free at 800-648-5372
www.moreheadstate.edu/prestonsburg
Bachelor of Arts - Area in Early Elementary (P-5)
Bachelor of Arts - Area in Middle Grades (5-9)
Bachelor of Social Work
Bachelor of University Studies

MSU at West Liberty
155 University Drive
West Liberty, KY 41472-0190
606-783-5381; 606-743-1500 or toll free at 800-648-5371
www.moreheadstate.edu/westliberty
Associate of Arts (AA) - University Studies
Bachelor of University Studies

University Center of the Mountains/Hazard Community and Technical College
J. Marvin Classroom Center

Academic Support
Office of Academic Advising and Retention
The Office of Academic Advising and Retention offers a variety of academic support programs to help students be successful.

Academic Services
Individualized academic counseling and guidance services are available upon request, as well as workshops and seminars centered around 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. Working with the Office of Career Services, the academic advisors offer 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 (TLC). 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, call 606-783-5200, go to www.moreheadstate.edu/tutoring or come to the Tutoring and Learning Center in Allie Young 220 or in the commons area on the first floor of the Camden Carroll Library.

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.

Provisional Studies Program
Provisionally admitted students are assigned to academic advisors in the Office of Academic Advising and Retention. 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. Complete any and all required developmental courses and FYS 101 with a grade of “C” or higher.
3. Successfully complete two semesters with a cumulative GPA of 2.0.
4. Successfully complete at least 24 semester hours, 12 of which must meet general education requirements.
5. Attend a minimum of five hours of documented study tables per week at an approved tutoring location.
6. Meet with an assigned academic advisor each semester in the Office of Academic Advising and Retention, once before mid-term and once after mid-term.
7. Complete a career assessment with the Office of Career Services if deemed necessary by the advisor.

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 may result in academic dismissal. For more information, contact the Provisional Studies Coordinator, 222 Allie Young Hall, 606-783-2310.

Office of First Year Programs

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

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 best interest, 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.

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. 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. All new freshmen and transfer students, including those that attended the summer orientation, are required to attend New Student Days. Students are notified of the specific dates and times of these activities upon their acceptance to MSU by the Office of First Year Programs.

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 Academic Advising and Retention in 321 Allie Young Hall or by calling 606-783-2084. It is the student’s responsibility to make the initial contact with the academic advisor.

Nontraditional and Commuter Student Counseling

The nontraditional/commuter coordinator is a resource for all undergraduate, nontraditional students who are 23-years of age or older, as well as all commuter students.

The nontraditional/commuter coordinator serves as an advocate for the increasing the number of adult students, student veterans, and Project Graduate students at MSU. The coordinator helps link these students to academic and campus resources for concerns such as study habits, time management, family, career, counseling and financial needs.

The nontraditional/commuter coordinator also directs the STEPS project, which provides workstudy wages to students participating in K-TAP. This office is located in 303F Breckenridge Hall and can be reached by via email: j.mcbride@moreheadstate.edu, or by phone: 606-783-5226.

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 plan current and future class schedules;
3. To initiate class changes during the drop/add period;
Student Health 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 call 606-783-2614, or visit www.moreheadstate.edu/sss.

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 areas. Bring a copy of your current insurance with you when you visit the clinic.

Health clinic hours are 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 www.moreheadstate.edu/ucc.

Outreach Education

The staff of Counseling and 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 addressing issues related to alcohol and drug abuse. The counselor serves as a coordinator for networking members of the University community with local and regional programs and services that assist individuals with alcohol and/or drug abuse related problems.

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.

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.

Information on credit for prior learning may be obtained by contacting the Office of Adult Education and College Access, 142 Waterfield Hall, 606-783-2005 or online at www.moreheadstate.edu/aos.

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, contact the Testing Center at the address and phone number above or visit www.moreheadstate.edu/testing.
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 from the College Board 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 www.moreheadstate.edu/testing.

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.

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 Activities, Inclusion and Leadership at 606-783-2071 or www.moreheadstate.edu/activities.

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 of $25 or more 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 www.moreheadstate.edu/alumni.

Automobile Registration

A valid Morehead State University parking permit is required for any motor vehicle or 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 online at www.moreheadstate.edu/police.

Camden-Carroll Library

Camden-Carroll Library is the information center of Morehead State University. The library’s collection 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 email. 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: LISM 101: Introduction to Library Research and LISM 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 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 collection 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 www.moreheadstate.edu/library.

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-ins are accepted; however, appointments are recommended. For additional information, visit www.moreheadstate.edu/career.

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.

Computer Resources

Morehead State University, through the Office 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, email 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 35 networked student labs/classroom facilities available to students throughout the campus. 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 at my.moreheadstate.edu.

Other technology resources available to students include free voice mail (upon request) and email service, as well as free local phone service and digital cable television services to students living in a residence hall.

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.

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, room and board, fees and books. Honors students will also receive up to $1,500 toward 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, 606-783-2807 or 606-783-2726 or visit www.moreheadstate.edu/honors. For additional scholarship information, visit www.moreheadstate.edu/scholarships.

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.

For additional information on study abroad opportunities, visit www.moreheadstate.edu/oie, or contact the Director of International Student Services, 422 University Blvd., Morehead State University, Morehead, KY 40351, 606-783-2096 or 606-783-2726.

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:

- applying to extend or change immigration status;
- transferring to or from the University;
- dropping classes below a full-time enrollment;
- leaving the University for any reason;
- accepting employment for the first time or engaging in summer employment;
- changing residence/phone numbers;
- seeking optional or curricular practical training;
- applying for a Social Security number;
- planning to leave and reenter the United States, while still a student;
- applying for reinstatement;
- changing from one academic level to another;
- changing from one academic program to another; and
- 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. For more detailed information concerning international students, refer to www.moreheadstate.edu/oie.

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, 606-783-2024.

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 calling 606-783-2179. The completed application form 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.

Academic Regulations and Procedures

Academic Bankruptcy

Academic Bankruptcy gives undergraduate students with an unacceptable GPA 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 bankrupt semester. The grades and credit hours earned during that semester are disregarded for University requirements. The notation "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 GPA of at least 1.0 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, 201 Ginger Hall, or by clicking on "Forms" at the following link: www.moreheadstate.edu/registrar. The form must be signed by the student’s academic advisor or the department chair and returned to the Office of the Registrar for verification of eligibility. The Office of the Registrar will notify the student in writing regarding eligibility. An appeal of the eligibility ruling is made through the office of the associate vice president for academic affairs.

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.
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.

Visit UAR 131 for more detailed information specific to the Excused Absence policy: www.moreheadstate.edu/daa/uar.

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.

Center for Regional Engagement

The Center for Regional Engagement (CRE) at Morehead State University sees itself as a threshold into the institution for external agencies (i.e. individual residents, nonprofit, governmental, quasi-governmental agencies and private industry) to collaborate and partner with MSU. At the same time, we see ourselves as an informational portal for our internal constituents (i.e. students, faculty and staff) to identify regional needs and provide services, resources and partner with external agencies to help improve the quality of life throughout MSU’s service region related to community building, economic/entrepreneurial development, education, and health and wellness.

For more information regarding the CRE, visit www.moreheadstate.edu/engagement, call 606-783-9327, or email cre@moreheadstate.edu.

Regional Engagement Courses

Courses marked with a "Z" designation integrate meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility and strengthen communities. For more information, contact the Center for Regional Engagement at 606-783-9327 or cre@moreheadstate.edu.

Change in Schedule

Schedule changes include the following:

- Adding and dropping a course
- Changing from one course section to another
- Changing the number of credits involved in any course
- Changing from audit to credit or from credit to audit.

After the last day to drop, full-term courses may be dropped only because of documented circumstances. Approval of the Associate Vice President of Academic Affairs required.

Course Load

To view the course load policy, visit UAR 101 at www.moreheadstate.edu/files/units/daa/uar/uar101-01.pdf.

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.

To view the Course Numbering Policy, visit UAR 102 at www.moreheadstate.edu/daa/uar.

Early Graduate School

A Morehead State University undergraduate student who has completed 90 or more credit hours toward the completion of the baccalaureate degree may be considered for undergraduate concurrent admission to the Graduate School to enroll in graduate coursework. To be eligible for undergraduate concurrent admission, the student must have an overall undergraduate GPA of at least 3.0 at the time of admission. The student must maintain an overall undergraduate GPA of at least 3.0 and a graduate GPA of at least 3.0 to continue in the Early Graduate School program. If the student drops below the 3.0 minimum GPA, they will not be allowed to continue in the program. Students may earn a maximum of 12 graduate credit hours while holding undergraduate concur-
rent admission status. An application to the Graduate School must be completed at the beginning of the semester requested. Undergraduate concurrent admission to the Graduate School must be approved by the Graduate Dean. Students who are enrolled in both undergraduate and graduate coursework may receive an adjustment to their financial aid. Please contact the Office of Financial Aid to determine what changes may occur.

Final Examinations

Any student with more than two final examinations scheduled on any one date 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.

Grade Reports

Grades will be available on the student’s Web Advisor account at my.moreheadstate.edu no later than Wednesday following the end of the term.

All undergraduate students receive mid-term grades.

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 or other significant extenuating circumstances (refer to UAR 108). 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 15 and March 15 for Fall Term.

IP — In progress — May only be assigned to 670 (Directed Research), 699 (Thesis) or 676 (Directed Study) Courses.

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 grading only.

P — Withdrawed from school passing — Not computed in GPA.

F — Withdrawed from school failing — Computed in GPA as credits attempted.

R — Course repeated — Replaces original grade for repeated course; not computed in GPA.

U — Unofficial withdrawal — Computed as credits attempted; computed as zero quality points in GPA calculation. Given to a student who stopped attending the course, did not complete the course and did not officially withdraw from the course.

W — Withdrawed officially — No hours attempted; not computed in GPA.

WY — Withdrawal from audit class — Not computed in GPA.

Y — Audit credit — No hours attempted; not computed in GPA; not applicable to degree program.

Note: The grades K and N are restricted to students who opt to take a course with a pass-fail option. The pass-fail option is restricted and applicable only to free elective courses or specific courses identified for a major or minor used for competency evaluation (i.e., those courses not required for the area, major, minor or general education requirements). Refer to the undergraduate catalog for additional information.

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 class.

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 completed 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-year and four-year graduates who have achieved academic excellence. Baccalaureate degree recipients who complete at least 43 hours at MSU with an institutional GPA of 3.5 to 3.69 graduate cum laude; 3.7 to 3.89 graduate magna cum laude; and 3.9 to 4.0 graduate summa cum laude. Associate degree recipients who complete a minimum of 32 semester hours at MSU and earn an institutional cumulative GPA of 3.6 or better graduate with distinction. Only work completed at MSU is used in computing GPA.

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 the Office of Enrollment Services, 100 Admissions Center. Students returning after a period of one semester or more must reapply through the Office of Enrollment Services and process registration in the department of the major.

Repeating Courses

The repeat policy was implemented to establish guidelines and procedures for repeating courses. To view the policy, visit UAR 107 at www.moreheadstate.edu/daa/uar.

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.

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.

To access forms pertinent to student records, visit www.moreheadstate.edu/registrar.

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 cumulative MSU 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 the following semester. At the end of each academic term, the registrar provides a grade report that reflects grades for the term and the MSU cumulative GPA (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 during 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 GPA 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 Academic Advising and Retention.

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 re-admittance to the University. See also the Financial Aid Satisfactory Progress Standard which is a separate process.

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 the Transcript Request Form located under "Forms" at www.moreheadstate.edu/registrar or 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. Credit card information will not be retained.
- 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.
- Payment is due at time of request.
- You may have the transcript mailed, return the next day to pick it up at the transcript window or pay an additional fee for same day service. You must have a photo ID to pick up the transcript.

Request a transcript online
Morehead State University has authorized the National Student Clearinghouse to provide transcript ordering via the Web. You can order transcripts using any major credit card. Your card will only be charged after your order has been completed.
- To order an official transcript, go to: www.getmytranscript.com.
- Select "Order/Track Transcript"
- Select Morehead State University from the drop-down box and click submit.
- The site will walk you through placing your order, including delivery options and fees. You can order as many transcripts as you like in a single session. A processing fee will be charged per recipient.
- Order updates will be emailed to you. You can also track your order online.

Note: If you have a hold on your record, you will not be able to request a transcript until you clear all your holds.

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. If a portion of your account was paid by federal financial aid, you may have to repay a portion of these funds to the University after the normal withdrawal period. To print the Request for Medical Withdrawal form, visit www.moreheadstate.edu/provost. 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.

Medical Withdrawal Policy
The purpose of the Medical Withdrawal Policy (UAR 130.01) 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. To print the Request for Medical Withdrawal form, visit www.moreheadstate.edu/provost. 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.

Administrative Policies and Procedures
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. For detailed information concerning the grievance policy visit UAR 112.02 at www.moreheadstate.edu/daa/uar. The student grievance form can be found at www.moreheadstate.edu/provost.

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 previous violations of the code on file for particular student(s), 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.

Academic Recovery Program

The Academic Recovery Program is designed to provide resources and services to students who fall below scholastic standing guidelines. Students in the program are required to participate in an academic workshop at the beginning of the semester, complete an action plan, submit progress forms, complete documented study/tutoring hours, and meet with a peer coach throughout the semester. Visit the following website for additional information regarding the Academic Recovery Program: www.moreheadstate.edu/probation. The Office of Academic Advising and Retention can be reached at 606-783-2084, 321 Allie Young Hall.

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 and to report harassment. To view the Sexual Harassment Policy, visit www.moreheadstate.edu/hr or contact Human Resources at 606-783-2097 to request an electronic or hard copy of the policy.

Students' Rights to Access Records

(Buckley Amendment - Public Law 93-380)

Morehead, Kentucky

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 is 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. "Secondary school level" means the educational level (not beyond grade 12), at which secondary education is provided, as determined under state law.

3. "University officials" include any full- or part-time administrators, faculty and staff who are employed by the University, or other person, agency or organizational personnel appointed or contracted with to act on behalf of the University or to carry out the functions necessary to fulfill the purposes of the institution. In addition, students who are serving on a disciplinary board or committee are considered to be "University officials" for purposes of access to education records. "Legitimate educational interest" is based upon a determination that access to the education records is appropriately needed by the "University official" to perform a responsibility, to evaluate a student, to obtain necessary information, to furnish necessary information or for other similar reasons.

I. Students' rights to inspection of records and review thereof:

a. 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:

1. Identifying data
2. Academic work completed
3. Level of achievement (grades, standardized achievement test scores)
4. Attendance data
5. Scores on standardized intelligence, aptitude and psychological tests
6. Interest inventory results
7. Family background information
8. Teacher or counselor ratings and observations
9. Verified reports of serious or recurrent behavior problems
10. Cumulative record folder

b. The institution is not required to make available to students confidential letters of recommendation placed in their files before January 1, 1975.

c. Students do not have the right of access to records maintained by the University's law enforcement officials.

d. 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.

e. 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.

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.

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 or his/her designee shall make the necessary arrangements. The hearing will
be established according to the procedure delineated by the University.

II. Restrictions on the release of student records
   a. Morehead State University will not release records without written consent of the students except to:
      1. to other local educational officials, including teachers of local educational agencies who have legitimate educational interest;
      2. to 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;
      3. to authorized representatives of the Comptroller General of the United States, the Secretary of Health, Education, and Welfare, or an administrative head of an educational agency, in connection with an auditor evaluation of federally supported programs; or
      4. to parents of dependent students.
   b. Morehead State University will not furnish personal records to anyone other than the described above unless:
      1. 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
      2. 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
   a. Authorized personnel must provide positive identification and indicate reasons for each request for examination.
   b. Authorized personnel who have legitimate educational interests may review students’ records, showing cause.
   c. 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.

If you object to your directory information being released, contact the Student Life Office, 211 ADUC, for more information.
Caudill College of Arts, Humanities and Social Sciences

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

M. Scott McBride, Dean
212 Rader Hall
Office: 606-783-2650
Fax: 606-783-5046
Email: s.mcbride@moreheadstate.edu

School of the Arts

Department of Art and Design
- BA - Art Major
- BA - Art Major with Teacher Certification (P-12)
- BA - Area in Art
- BA - Area in Art with Teacher Certification (P-12)
- Minors: Art History, Arts Administration, Studio Art, Visual Communication

Department of Communication, Media and Leadership Studies
- BA - Area in Convergent Media
- BA - Area in Strategic Communication
- Minors: Public Relations and Event Planning, Strategic Communication Leadership

Department of Music, Theatre and Dance
- BME - Area in Music Education (with tracks)
- BM - Area in Music Performance (with tracks)
- BA - Music Major
- BA - Traditional Music Studies Major
- BA - Theatre Major
- BA - Area in Theatre with Teacher Certification (P-12)
- Minors: Dance, Music, Theatre, Traditional Music Studies

School of Humanities and Social Sciences

Department of English
- BA - English Major
- BA - Area in English with Teacher Certification (Secondary)
- BFA - Creative Writing Major
- Minors: Creative Writing, English, Linguistics, Literature

Department of History, Philosophy, Religion and Legal Studies
- BA - History Major
- BA - Area in Legal Studies
- BA - Legal Studies Major
- BA - Area in Philosophy (with tracks)
- BA - Philosophy Major (with tracks)
- BA - Area in Social Studies
- Minors: History, Legal Studies, Philosophy, Religious Studies

Department of International and Interdisciplinary Studies
- BA - French Major
- BA - French Major with Teacher Certification (P-12)
- BA - Interdisciplinary International Studies (with tracks)
- BA - Spanish Major
- BA - Spanish Major with Teacher Certification (P-12)
- Minors: Appalachian Studies, Canadian Studies, Film Studies, French, Geography, Interdisciplinary International Studies, Spanish, Interdisciplinary Women's Studies

Department of Military Science
- Minor: Military Science

Department of Sociology, Social Work and Criminology
- BA - Area in Criminology and Criminal Justice
- BA - Sociology Major
- BSW - Area in Social Work
- Minors: Chemical Dependency Counseling, Criminology, Social Work, Sociology

School of the Arts

Department of Art and Design

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

Faculty
C. Field, R. Franzini, D. Golding, S. Green, J. Gritton, D. Li, 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 and Design offers programs in art education, art history, arts administration and studio art. Courses at 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 toward the degree.
6. A total of 12 hours from Internship courses are allowable toward the degree.

The following general education course is required for students in the area and the major in art:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 499C — Visual Art Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Requirements**  **36**

**Bachelor of Arts - Area in Art**

**Program Requirements**

**General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ART 499C - Visual Arts Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

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

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

**Area Requirements**

**Art Area**  **54**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100 — 2D Design and Color Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ART 102 — 3D Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ART 109 — Digital Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ART 112 — Drawing Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ART 214 — Painting Techniques I</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose two of the following:  **6**

- ART 263 — World Arts
- ART 264 — Art History II, or
- ART 265 — Art History III

**Choose one of the following:**  **3**

- ART 245 — Ceramics I or
- ART 294 — Sculpture I

Choose one of the following:  **3**

- ART 351 — Intaglio Printmaking,
- ART 352 — Lithographic Printmaking, or
- ART 373 — Basic Black and White Photography

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 304 — Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART History (two 300-level or higher electives)</td>
<td>6</td>
</tr>
<tr>
<td>ART electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Components of Degree Requirements**

**General Education**  **36**

**Area Requirements**  **54**

**Free Electives**  **30**

**TOTAL PROGRAM REQUIREMENTS**  **120**

*A total of 12 hours from private applied art courses are allowable toward the degree. A total of 12 hours from Internship courses are allowable toward degree.*

**Bachelor of Arts - Art Major**

**Program Requirements**

**General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 499C — Visual Art Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

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

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

**Major Requirements**

**Art Major**  **36**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
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<tr>
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</tr>
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<td>ART 214 — Painting Techniques I</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose two of the following:  **6**

- ART 263 — World Arts,
- ART 264 — Art History II, or
- ART 265 — Art History III

Choose one of the following:  **3**

- ART 245 — Ceramics I or
- ART 294 — Sculpture I

Choose one of the following:  **3**

- ART 351 — Intaglio Printmaking,
- ART 352 — Lithographic Printmaking, or
- ART 373 — Basic Black and White Photography

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</thead>
<tbody>
<tr>
<td>ART History (300-level or higher elective)</td>
<td>3</td>
</tr>
<tr>
<td>ART electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Components of Degree Requirements**

**General Education**  **36**

**Major Requirements**  **36**

*Area Requirements**  **54**

**Free Electives**  **30**

**TOTAL PROGRAM REQUIREMENTS**  **120**
Free Electives 27
Minor 21
TOTAL PROGRAM REQUIREMENTS 120
*A total of 12 hours from Private Applied Art courses are allowable toward the degree. A total of 12 hours from Internship courses are allowable toward the degree.

Bachelor of Arts - Area in Art with Teacher Certification (P-12)

Program Requirements

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

Area Requirements

Art Teaching 54
ART 100 — 2D Design and Color Foundations 3
ART 102 — 3D Foundations 3
ART 109 — Digital Foundations 3
ART 112 — Drawing Foundations 3
ART 214 — Painting Techniques I 3

Choose two of the following: 6
ART 263 — World Arts,
ART 264 — Art History II, or
ART 265 — Art History III

Choose one of the following: 3
ART 245 — Ceramics I or
ART 294 — Sculpture I

Choose one of the following: 3
ART 351 — Intaglio Printmaking,
ART 352 — Lithographic Printmaking, or
ART 373 — Basic Black and White Photography

ART 300 — Teaching Elementary and Middle School Art 3
ART 304 — Drawing II 3
ART 321 — Materials and Methods for Secondary Art 3
ART History (two 300-level or higher electives) 6
*ART Electives 12

Professional Education Requirements 30
ART 301 — Field Experience in Art Education 3
EDF 207 — Foundations of Education 3
EDF 311 — Learning Theories and Assessment of Educ 3
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Mngr. for Secondary Teachers
EDSP 230 — Education of Exceptional Children 3

Components of Degree Requirement
General Education 36
Area Requirements 54
Professional Education 30
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Arts - Art Major with Teacher Certification (P-12)

Program Requirements

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

Major Requirements

Art Teaching 36
ART 100 — 2D Design and Color Foundations 3
ART 102 — 3D Foundations 3
ART 109 — Digital Foundations 3
ART 112 — Drawing Foundations 3
ART 214 — Painting Techniques I 3

Choose two of the following: 6
ART 263 — World Arts,
ART 264 — Art History II, or
ART 265 — Art History III

Choose one of the following: 3
ART 245 — Ceramics I or
ART 294 — Sculpture I

Choose one of the following: 3
ART 351 — Intaglio Printmaking,
ART 352 — Lithographic Printmaking, or
ART 373 — Basic Black and White Photography

ART 300 — Teaching Elementary and Middle School Art 3
ART 321 — Materials and Methods for Secondary Art 3
*ART History (300-level or higher ART history electives) 3

Professional Education Requirements 30
ART 301 — Field Experience in Art Education 3
EDF 207 — Foundations of Education 3
EDF 311 — Learning Theories and Assessment of Educ 3
EDSE 312 — Educational Methods and Technology 3
EDSE 416 — Clinical Practice 12
EDSE 483 — Classroom Organization and Mngr. for Secondary Teachers
EDSP 230 — Education of Exceptional Children 3

Components of Degree Requirement
General Education 36
Major Requirements 36

*A total of 12 hours from Private Applied Art courses are allowable toward the degree. A total of 12 hours from Internship courses are allowable toward the degree.
Professional Education 30
Minor 21
TOTAL PROGRAM REQUIREMENTS 123

Art History Minor

Art History Minor Requirements
ART 100 — 2D Design and Color Foundations 3
ART 109 — Digital Foundations 3
ART 263 — World Arts 3
ART 264 — Art History II 3
ART 265 — Art History III 3
ART History 300-level or above 6
TOTAL MINOR REQUIREMENTS 21

Arts Administration Minor

Arts Administration Minor Requirements
ART 200 — Introduction to Arts Administration 3
ART 307 — Arts Administration Practicum I 1
ART 401 — Arts Administration Practicum II 2
Management - Take six hours 6
MNGT 201 — Principles of Management
MNGT 310 — Small Business Organization
MNGT 417 — Management and Marketing of Public and Nonprofit Organizations
MNGT 465 — Organizational Behavior
BBA 475 — Leadership Development
GOVT 351 — Public Administration
GOVT 353 — Public Personnel Administration
GOVT 451 — Seminar in Bureaucracy and Public Management
LEAD 101 — Leadership I
Management
Legal Issues - Take three hours 3
BBA 261 — The Legal Environment of Business Organizations
MNGT 362 — The Legal Environment and Business Practices
CVM 492 — Media Law and Ethics
Finance and Business - Take three hours 3
ACCT 281 — Principles of Financial Accounting
MNGT 101 — Reel Business
MUSW 310 — Music Business
Marketing and Communication - Take six hours 6
MKT 204 — Marketing
COMS 110 — Strategic Messaging
COMS 300 — Strategic Organizational Leadership
COMS 340 — Event Planning and Public Relations
COMS 382 — Public Relations Principles
MKT 345 — Marketing Strategies for Small Business
TOTAL MINOR REQUIREMENTS 24

Visual Communication Minor

Visual Art Minor Requirements
For non-art students only:
ART 100 — 2D Design and Color Foundations 3
ART 109 — Digital Foundations 3
ART 112 — Drawing Foundations 3
ART 205 — Graphic Design I 3
ART 206 — Websites I 3
Electives - choose three (nine hours) of the following: 9
ART 207 — Websites II
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 333 — Design Layout and Pre-press
ART 410 — Motion Graphics
TOTAL MINOR REQUIREMENTS 24

Studio Art Minor

Studio Art Minor Requirements
ART 100 — 2D Design and Color Foundations 3
ART 102 — 3D Foundations 3
ART 109 — Digital Foundations 3
Choose two of the following: 6
ART 263 — World Arts
ART 264 — Art History II
ART 265 — Art History III
Choose one of the following: 3
ART 245 — Ceramics I
ART 294 — Sculpture I
Choose one of the following: 3
ART 351 — Intaglio Printmaking
ART 352 — Lithographic Printmaking
ART 373 — Basic Black and White Photography
ART elective 3
TOTAL MINOR REQUIREMENTS 24

Department of Communication, Media and Leadership Studies

Keith Terry, Chair
111 Breekinridge Hall
606-783-2134

Faculty
R. Abell, L. Albert, A. Andaloro, N. Earl, J. Hill, J. Kenney, G. LaFleur, J. Modaff, D. Plum, K. Terry (Chair), C. Thomas

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

Program Competencies

Students will demonstrate:

1. The ability to communicate professionally in written, oral and visual forms.
2. The ability to select media and apply appropriate technology for the dissemination of communication content.
3. The ability to critically analyze and evaluate communication sources and content.
4. Knowledge of the legal and ethical rights and responsibilities of media content providers serving diverse populations.
5. Understanding media impact on the global community.

Assessment Procedures

Senior Project in Capstone Course

Program Requirements

General Education

COMS 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.

Area Requirements

Convergent Media 24

*CVM 177, 277, 377, 477 — Convergent Media Practicum (1 hour credit each)
ART 109 — Digital Foundations 3
ART 206 — Websites I 3
CVM 110 — History of Communication Media 3
CVM 140 — Field Production Techniques (lab required) 3
CVM 201 — Media Writing 3
CVM 250 — Content Gathering Techniques (lab required) 3
CVM 492 — Media Law and Ethics 3

Elective Requirements 24

Choose two courses from the following: 6
CVM 301 — News Writing and Reporting
CVM 320 — Feature and Documentary Writing
CVM 358 — Sports Writing
CVM 401 — Advanced Multimedia News
CVM 465 — Opinion Writing

Choose two courses from the following: 6
CVM 240 — Elements of Studio Production
CVM 340 — TV Studio Practices
CVM 350 — Audio Production and Direction
CVM 481 — Documentary Production
CVM 483 — Animation Production
CVM 485 — Narrative Video Production

Choose one course from the following: 3
ART 100 — 2D Design and Color Foundations
ART 205 — Graphic Design I
ART 207 — Websites II

ART 306 — Websites III
ART 309 — Computer Art
ART 410 — Motion Graphics

Choose one course from the following: 3
CVM 452 — Issues in Contemporary Media
CVM 462 — Media Criticism
CVM 464 — Public Opinion and the Media

Choose two courses from above options: 6
Students may choose from any of the above for the remainder of electives

*Students must complete a minimum of three hours of practicum at three different levels. Students may repeat each practicum once for a maximum of eight hours of practicum. Any practicum hours beyond three will count toward university elective hours.

**Successful completion of an internship is required to complete the program. Assessment of the internship is integrated into the general education capstone course. Students must provide evidence of successful completion of the internship, including submission of a portfolio and completed supervisor evaluation form, prior to receiving credit in the capstone course. Students may elect to complete the internship for course credit or without credit. To earn course credit, students must complete a minimum of 31 clock hours logged for each hour of credit and register for the appropriate course. Earned internship credit hours will count toward University elective hours.

Components of Degree Requirements

General Education 36
Area Requirements 24
Electives 24
General Electives 36

TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Arts - Area in Strategic Communication

Program Competencies

Students will:

1. Demonstrate critical thinking when developing and responding to strategic messages.
2. Apply key concepts and theories of strategic communication.
3. Demonstrate mastery of written, oral, visual and mediated strategic communication.
4. Identify and apply concepts of ethical strategic communication.
5. Demonstrate strategic communication skills needed for responsible team leadership and participation.
6. Demonstrate abilities to treat conflict creatively through mediation and negotiation.

Assessment Procedures

Senior Project in Capstone Course
Program Requirements

General Education
COMS 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.

Area Requirements

**Strategic Communication** 24
COMS 100 — Introduction to Strategic Communication 3
COMS 110 — Strategic Messaging 3
COMS 200 — Strategic Communication Research 3
COMS 250 — Intro to Intercultural Communication* 3
COMS 290 — Conflict and Communication* 3
COMS 300 — Strategic Organizational Leadership 3
COMS 330 — Argumentation and Persuasion 3
COMS 277 — Professional Practices 1
COMS 347 or COMS 447 — Internship+ 2

**Elective Requirements** 24
Skills and Experience (Choose three courses for nine hours)
COMS 310 — Professional Presentations and Speech Writing
COMS 340 — Event Planning and Public Relations
COMS 383 — Facilitating Team Communication
COMS 400 — Interviewing
CVM 201 — Media Writing

Critical Thinking (Choose two courses for six hours) 6
COMS 350 — Communication, Culture and Diversity
COMS 420 — Analysis of Persuasion
CVM 464 — Public Opinion and the Media
CVM 492 — Media Law and Ethics

Public Relations (Choose three courses for nine hours) 9
COMS 333 — Social Media and Community
COMS 370 — Communication and Health
COMS 382 — Public Relations Principles
COMS 405 — Communication Issue Management
COMS 482 — Public Relations Campaigns

*These courses are options to meet the distribution requirements in general education; however, "double dipping" is not allowed. Students will need to select a course other than COMS 290 for HUM II and COMS 250 for SBS I in general education.

**Electives** 6
Choose two courses (six hours) from the list below: 6
COMS 300 — Strategic Organizational Leadership
COMS 310 — Professional Presentations and Speech Writing
COMS 333 — Social Media and Community
COMS 350 — Communication, Culture and Diversity
COMS 370 — Communication and Health
COMS 383 — Facilitating Team Communication
COMS 400 — Interviewing
COMS 405 — Communication Issue Management
COMS 420 — Analysis of Persuasion

**TOTAL MINOR REQUIREMENTS** 21

Strategic Communication and Leadership Minor

**Core Requirements** 15
COMS 100 — Introduction to Strategic Communication 3
COMS 300 — Strategic Organizational Leadership 3
COMS 310 — Professional Presentations and Speech Writing
COMS 333 — Social Media and Community
COMS 350 — Communication, Culture and Diversity
COMS 370 — Communication and Health
COMS 382 — Public Relations Principles
COMS 400 — Interviewing
COMS 405 — Communication Issue Management
COMS 420 — Analysis of Persuasion

**Electives** 6
Choose two courses (six hours) from the list below: 6
COMS 333 — Social Media and Community
COMS 340 — Event Planning and Public Relations
COMS 350 — Communication, Culture and Diversity
COMS 370 — Communication and Health
COMS 382 — Public Relations Principles
COMS 400 — Interviewing
COMS 405 — Communication Issue Management
COMS 420 — Analysis of Persuasion
COMS 482 — Public Relations Campaigns

**TOTAL MINOR REQUIREMENTS** 21

Department of Music, Theatre and Dance

Donald Grant, Chair
106 Baird Music Hall
606-783-2473
**Dance Faculty**
N. Davis

**Music Faculty**

**Theatre Faculty**
G. Carlisle, N. Davis, P. Denayer, D. Watkins

The Department of Music, Theatre and 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 teaching certification, 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 and Dance offers the Dance Minor program. Dance courses and the Dance Ensemble are open to all university students.

**Dance Minor Requirements**
THEA 105 — Modern Dance Technique 3
THEA 107 — Introduction to Dance 3
THEA 208 — Beginning Ballet 3
THEA 324 — Dance History 3

**Basic Dance Technique Elective**
Three credit hours

**Choose one of the following (three credit hours):**
THEA 205 — Intermediate Ballet
THEA 305 — Advanced Modern Dance Technique
THEA 308 — Intermediate Ballet or
THEA 408 — Advanced Ballet

**Performance Process Oriented**
Three credit hours

**Choose one of the following (three credit hours):**
THEA 207 — Dance Improvisation or
THEA 307 — Dance Composition

**Alternative Elective**
Three credit hours

**Choose one of the following (three credit hours):**
THEA 309 — Tap Dancing
THEA 311 — Theatre Practicum I
THEA 312 — Theatre Practicum II
THEA 318 — Hip/Hop and Urban Dance or
THEA 319 — Jazz Dance

**TOTAL MINOR REQUIREMENTS** 21

**Opportunities in Music**
The Department of Music, Theatre and Dance offers the Bachelor of Music degree in music education, jazz studies and performance and the Bachelor of Arts degree in Music. The Master of Music degree is offered in music education and performance. The department also offers a minor in music, traditional music and the Music Teachers National Association (MTNA) Certificate Program.

Music performance opportunities for all Morehead State University students are virtually unlimited. Regardless of the major area of study, students may continue to make music at MSU by becoming active in one of the department’s many large and small ensembles. Some of the groups available include the MSU Marching Band, Symphony Band, Concert Band, Orchestra, Jazz Ensembles I and II, Concert Choir, University Chorus, Chamber Singers, OperaWorks, Jazz Vocal Ensemble, Black Gospel Ensemble, Traditional Music Ensemble and numerous other small ensembles. All departmental ensembles and private lessons are scheduled classes that earn University credit.

**Entrance Auditions and Placement Assessment**
All new and transfer students planning to major or minor in music must audition before the music faculty on their principal performing instrument or voice prior to enrollment. The audition 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 established 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 and 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 majors; 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) is 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 degrees 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 student’s files in the department’s office. A copy of the accompanying paper/presentation media must also be filed in the student’s files in the department’s 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’s office. A copy of the accompanying paper/presentation media must also be filed in the student’s files in the department’s office. 

Note: Recital Hearing Form and Senior Project Approval Form must be submitted with any performance program (in electronic format) to the department’s office no later than two 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 (Fall 2012), $45 (Spring 2013)

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 (three 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 200-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 a grade of "C" or better (BME and BA in Music majors only), or 12 credits of 200-level private applied in principal instrument with a 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’s 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 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. All BME students must pass the PRAXIS prior to EDSE 416.

BME: Keyboard Track

Program Requirements

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.

Area Requirements

BME Core Requirements 32
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
MUSE 207 — Foundations of Music Education 3
MUSE 215 — Microcomputers and Music 3
MUSE 325 — Materials and Methods for Elementary Grades
MUSH 267 — World Cultures Through Humanities 3
MUSH 361 — History of Music I 3
MUSH 362 — History of Western Music II 3

**Track Core Requirements** 14
MUSM 200 — Student Recital 0
*(complete four semesters with passing grade of "K" required)*
MUSM 400 — Student Recital 0
*(complete three semesters with passing grade of "K" required)*
MUSP 2XX — Private Applied-Major Instrument Course Number 8
*(complete four semesters at two credit hours each)*
MUSP 200 — Performance Class *(Complete four semesters with passing grade of "K" required)* 0
MUSP 4XX — Private Applied-Major Instrument Course Number 4
*(complete two semesters at two credit hours each)*
MUSP 400 — Performance Class - Major Instrument Section Number *(Complete three semesters with passing grade of "K" required)* 0
MUSP 499C — Senior Recital *(credit hours counted in general education)* 0
MUST 430 — Arranging 2

**Choose one subtrack: Instrumental or Vocal** 25

### Subtrack I: Instrumental Requirements
MUSM 372 — Marching Band *(complete four semesters at one credit hour each)* 4
MUSM 370 — Concert Band or 3
MUSM 371 — Symphony Band *(complete three semesters at one credit hour each)* 2
MUSM 382 — Jazz Vocal Ensemble, 2
MUSM 391 — University Chorus, 2
MUSM 392 — Concert Choir, 2
MUSM 393 — Chamber Singers, or 2
MUSM 394 — Opera Works *(one credit hour each semester registered)* 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSG 211 — Classical Woodwinds I</td>
<td>1</td>
</tr>
<tr>
<td>MUSG 213 — Classical Brasswinds I</td>
<td>1</td>
</tr>
<tr>
<td>MUSG 214 — Classical Brasswinds II</td>
<td>1</td>
</tr>
<tr>
<td>MUSG 217 — Classical Percussion</td>
<td>1</td>
</tr>
<tr>
<td>MUSG 226 — Classical Strings</td>
<td>1</td>
</tr>
<tr>
<td>MUSG 239 — Classical Voice</td>
<td>1</td>
</tr>
<tr>
<td>MUSE 376 — Instrumental Materials and Methods</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 378 — Piano Pedagogy</td>
<td>2</td>
</tr>
</tbody>
</table>

### Subtrack II: Vocal Requirements
*(one credit hour each semester registered)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSG 240 — Diction for Singers</td>
<td>1</td>
</tr>
<tr>
<td>MUSG 241 — Diction for Singers II</td>
<td>1</td>
</tr>
<tr>
<td>MUSE 375 — Vocal Materials and Methods</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 378 — Piano Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>MUSE 416 — Vocal Pedagogy for the Music Educator</td>
<td>2</td>
</tr>
<tr>
<td>MUSP 340 — Private Applied Voice</td>
<td>2</td>
</tr>
</tbody>
</table>

**Choose three hours from the following:**
MUSG 471, MUSC 472, MUSC 473, MUSG 125, MUSG 183, MUSE 377, MUSE 416, MUSE 479, MUSH 481, MUSH 490, MUSH 491, MUSM 345, MUSM 387, MUSM 389, MUSP 341, MUSP 342, MUSP 480

### Professional Education Requirements 15
EDF 207 — Foundations of Education *(SBS I exchange)* 0
EDF 211 — Human Growth and Development *(SBS II exchange)* 0
EDF 311 — Learning Theories and Assessment 3
EDSE 416 — Clinical Practice 12

### Components of Degree Requirements

<table>
<thead>
<tr>
<th>Area</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>36</td>
</tr>
<tr>
<td>Core</td>
<td>32</td>
</tr>
<tr>
<td>Track</td>
<td>46</td>
</tr>
<tr>
<td>Professional Education</td>
<td>15</td>
</tr>
</tbody>
</table>

**TOTAL PROGRAM REQUIREMENTS** 129

**BME: Orchestral Strings Track**

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).

**Program Requirements**

<table>
<thead>
<tr>
<th>Area</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>36</td>
</tr>
<tr>
<td>Core</td>
<td>32</td>
</tr>
<tr>
<td>Track</td>
<td>46</td>
</tr>
</tbody>
</table>

**General Education Total** 36

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

**Area Requirements**

<table>
<thead>
<tr>
<th>BME Core Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<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 236 — Music Theory III</td>
<td>2</td>
</tr>
<tr>
<td>MUST 237 — Music Theory IV</td>
<td>2</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>
</tbody>
</table>

Caudill College of Arts, Humanities and Social Sciences 47
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

*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 Track Requirements 48
MUSM 200 — Student Recital 0
(complete four semesters with passing grade of "K" required)
MUSM 400 — Student Recital 0
(complete three semesters with passing)
MUSP 2XX — Private Applied Area 8
(principal instrument course number)
Two-hours upper division
*MUSP 4XX — Private Applied Area 4
(principal instrument course number)
MUSP 200 — Performance Class (0 credit hours with four semesters of passing grade if "K" required) 0
*MUSP 400 — Performance Class (0 credit hours with three semesters of passing grade of "K" required) (principal instrument section number)
#MUSM 379 — University Orchestra (one credit each) 7
MUSM 382, MUSM 391, MUSM 392, MUSM 393, or
MUSM 394 (one credit each) 2
MUSC 271 — 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 217 — Class Percussion 1
MUSG 226 — Class Strings 1
MUSG 239 — Class Voice (instrumental section) 1
MUST 430 — Arranging 2
MUSE 207 — Foundations of Music Education 3
**MUSE 325 — Materials and Methods for Elementary Grades 3
**MUSE 376 — Instrumental Methods and Materials 3
Music electives selected from:
MUSC 471, MUSC 473, MUSE 377, MUSE 416,
MUSE 479, MUSG 183, MUSH 490, or MUSM 3XX

*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.

+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 15
**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 Edu 3
***EDSE 416 — Clinical Practice 12

*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 Requirements
General Education 36
Core 30
Track 48
Professional Education 15
TOTAL PROGRAM REQUIREMENTS 129

BME: Percussion Track
Percussion music education students are required to enroll in and participate in all activities of the marching band each fall semester and in the concert or symphony bands 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 bands 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).

Program Requirements
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
Successfully completing 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.

**Area Requirements**

**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

*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 program evaluation and transcripts.

**Percussion Track 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): 0
- MUSM 369 — Percussion Ensemble (six semesters): 6
  - #MUSM 370 — Concert or MUSM 371 — Symphony Band (three semesters): 3

+MUSM 372 — Marching Band: 4
MUSM 382, MUSM 391, MUSM 392, MUSM 393, or 2
MUSM 394 (one credit each)
MUSC 271 — 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

*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 is 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.

**Admission to TEP is required.

**Application for clinical practice submitted one semester in advance to Educational Services Unit.

**Professional Education Requirements**

- **EDF 207 — Foundations of Education (credit hours counted in SBS I of General Education Distribution Courses): 15
- **EDF 211 — Human Growth and Development (credit hours counted in SBS II of General Education Distribution Courses):
- **EDF 311 — Learning Theories and Assessment in Education: 3
- **EDSE 416 — Clinical Practice: 12

*Successful completion prerequisite for admission to Teacher Education Program (TEP)

**Admission to TEP is required to enroll in these courses.

Components of Degree Requirements

- General Education: 36
- Core: 30
- Track Requirements: 48
- Professional Education: 15

**TOTAL PROGRAM REQUIREMENTS: 129

BME: Voice Track

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.
Program Requirements

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.

**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.

Area Requirements

BME Core Requirements  30
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

*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 program evaluation and transcripts

Voice Track Requirements  48
MUSM 200 — Student Recital  0
(complete four semesters with passing grade of "K" required)
MUSM 400 — Student Recital  0
(complete three semesters with passing grade of "K" required)

*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.

**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 Requirements

General Education  36
Core  30
Track  48
Professional Education  15

TOTAL PROGRAM REQUIREMENTS  129
BME: Woodwind and Brasswind Track

Woodwind and brasswind music education students 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 and brasswind music education majors are required to take two 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).

Program Requirements

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.

Area Requirements

BME Core Requirements  30

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

*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 program evaluation and transcripts.

Woodwind/Brasswind Track Requirements  48

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,  3
MUSM 392 — Concert Choir,  1
MUSM 393 — Chamber Singers, or  1
MUSM 394 — OperaWorks (two hours — one credit each semester registered)
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
MUST 430 — Arranging  2
MUST 207 — Foundations of Music Education  3
**MUSE 325 — Materials and Methods for Elem Grades  3
**MUSE 376 — Materials and Methods and Methods  3
Music Electives — select from the following:  5
MUSC 471, MUSC 473, MUSC 377, MUSC 416, MUS 479, MUSG 183, MUSG 490, and MUSM 3XX (any ensemble)

* 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.
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 15

- EDF 207 — Foundations of Education (credit hours counted in SBS I section of Gen. Ed. Distribution Courses)
- EDF 211 — Human Growth and Development (credit hours counted in SBS II section of General Education Distribution Courses)
- EDF 311 — Learning Theories and Assessment 3
- EDSE 416 — Clinical Practice 12
- ** Successful completion prerequisite for admission to Teacher Education Program (TEP)
- ** Admission to TEP required to enroll in these courses.
- *** Application for clinical practice submitted one semester in advance to Educational Services Unit.

### Components of Degree Requirements

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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: Collaborative Piano Track

Program Requirements

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.

BM: Area Requirements

Collaborative Piano Requirements 84
MUSC 271 — Basic Conducting 2
MUSC 215 — Microcomputers and Music 3
MUSC 125 — Score Reading 2
MUSC 183 — Studio Improvisation or Performance Class 1
MUSH 334 — Private Jazz 1
MUSH 240 — Diction for Singers I 1
MUSH 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 Music II 3
MUSH 481 — Keyboard Literature 3
MUSH 492 — Solo Vocal Literature 2
MUSM 389 — Keyboard Ensemble or Accompanying 1
MUSM 345 — Keyboard Chamber Music 1
MUSM 387 — Accompanying I 4
MUSM 3XX — Any Ensemble 4
MUSM 200 — Student Recital (four semesters with passing grade of "K" required) 0
MUSP 400 — Performance Class (four semesters with passing grade of "K" required) 0
*MUSP 400 — Performance Class (four semesters with passing grade of "K" required) 0
*MUSP 443 — Private Piano 2
*MUSP 3XX — Private Applied - Major Instrument 6
*MUSP 360 — Junior Recital 3
MUSP 131 — Music Theory I 3
MUSP 132 — Music Theory II 3
MUSP 133 — Music Reading I 1
MUSP 135 — Music Reading II 1
MUSP 233 — Music Reading III 1
MUSP 234 — Music Reading IV 1
MUSP 236 — Music Theory III 2
MUSP 237 — Music Theory IV 2
MUSP 430 — Arranging 2
MUSP 465 — Form and Analysis 2
MUSW 310 — Music Business 2
Music electives — 300-level and above 3
MUSG 471, MUSC 473, MUSE 377, MUSE 416, MUSE 479, MUSG 183, MUSH 490, MUSM 3XX (an ensemble)

+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 Requirements

General Education 36
BM: Collaborative Piano Requirements 84

TOTAL PROGRAM REQUIREMENTS 120

BM: Jazz Studies Track

Jazz Studies students 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).

Program Requirements

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.

BM: Area Requirements

Jazz Studies Requirements 84
MUSC 271 — Basic Conducting 2
MUSC 473 — Rehearsal Techniques for Jazz Ensembles 2
**MUSG 123 — Class Piano I, **MUSG 124 — Class Piano II, 2
**MUSG 223 — Class Piano III, **MUSG 224 — Class Piano IV 2
**MUSG 345 — Jazz Keyboard III or MUSG 346 — Jazz Keyboard IV (Jazz Pianists must do 345, 346) 2
**MUSG 245 — Jazz Keyboard I 1
**MUSG 246 — Jazz Keyboard II 1
MUSG 183 — Studio Improvisation 2
MUSG 338 — Studio Improvisation 2
MUSH 171 — Global Perspectives in Music 3
MUSH 361 — History of Western Music 3
MUSH 362 — History of Western Music II 3
MUSH 365 — Jazz History and Literature 3
MUSM 380 — Jazz Ensemble I, MUSM 381 — Jazz 8
Program Requirements

General Education

+MUP 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.

BM: Area Requirements

Keyboard Requirements 84

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 or 1
MUSP 334 — Private Jazz 1
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
MUSH 389 — Keyboard Ensemble or 4
MUSH 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 (three credit hours each of two semesters) 6
*MUSP 360 — Junior Recital 0
*MUSP 4XX — Private Applied (Principal Instrument) or 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 236 — Music Reading III 1
*MUST 237 — Music Reading IV 1
*MUST 240 — Jazz Theory 2
*MUST 243 — Arranging for Jazz Ensembles 2
*MUST 244 — Arranging for Jazz Ensembles 2
*MUSW 310 — Music Business 2
*MUSW 325 — Music Recording and Sound Reinforcement 3
Music electives — 300-level or above 2
MUSC 471, MUSC 472, MUSE 377, MUSE 416, MUSG 183, MUSH 490, MUSM 3XX 2

*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 program evaluation 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 Requirements

General Education 36
BM: Jazz Studies Requirements 84

TOTAL PROGRAM REQUIREMENTS 120

BM: Keyboard Track

Organ or harpsichord students are required to enroll in collaborative and ensemble keyboard courses.

*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.
by successfully completing a recital hearing.

**Components of Degree Requirements**

**General Education Requirements** 36
**BM: Keyboard Requirements** 84

**TOTAL PROGRAM REQUIREMENTS** 120

**BM: Orchestral Strings Track**

Orchestral string majors are required to enroll in and participate in all activities of the orchestra.

**Program Requirements**

**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.

**BM: Area Requirements**

**Orchestral Strings Requirements** 84

MUSC 271 — Basic Conducting 2
MUSC 472 — Instrumental 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 183 — Studio Improvisation 1
MUSH 171 — Global Perspectives in Music 3

MUSH 361 — History of Western Music 3

MUSH 362 — History of Western Music II 3

MUSM 379 — Orchestra 8
MUSM 378 — String Ensemble 4
MUSM 3XX — All Ensembles 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 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 or above** 5

MUSC 471, MUSC 473, MUSE 377, MUSE 416, MUSE 479, MUSG 183, MUSH 490, MUSM 3XX

*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 program evaluation 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 Requirements**

**General Education Requirements** 36

**BM: Orchestral Strings Requirements** 84

**TOTAL PROGRAM REQUIREMENTS** 120

**BM: Percussion Track**

**Program Requirements**

**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.

**BM: Area Requirements**

**Percussion Requirements** 84

MUSC 271 — Basic Conducting 2

MUSC 472 — Instrumental Conducting 2

MUSE 215 — Microcomputers and Music 3

MUSE 458 — Percussion Pedagogy 2

**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 183 — Studio Improvisation 1

MUSH 171 — Global Perspectives in Music 3

MUSH 361 — History of Western Music 3

MUSH 362 — History of Western Music II 3

MUSM 379 — Orchestra 8

MUSM 378 — String Ensemble 4

MUSM 3XX — All Ensembles 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 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, MUSG 490, MUSM 3XX

*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 program evaluation 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 Requirements

General Education Requirements 36

BM: Percussion Requirements 84

TOTAL PROGRAM REQUIREMENTS 120

BM: Voice

Voice students 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.

Program Requirements

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.

BM: Voice 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 — Concert Choir 8

MUSM 382 — Jazz Vocal Ensemble, 4

MUSM 393 — Chamber Singers, or

MUSM 394 — Opera Works

MUSM 200 — Student Recital

(four semesters with a passing grade of "K" required)

MUSG 400 — Student Recital

(four semesters with a passing grade of "K" required)

MUSP 200 — Performance Class

(four semesters with passing grade of "K" required)

*MUSP 400 — Performance Class

(four semesters with a passing grade of "K" required)

MUSP 2XX — Private Applied

(two credit hours each of first semesters)

MUSP 2XX — Private Applied

(three credit hours each third and fourth semesters)

*MUSP 400 — Private Voice

(three credit hours each with two semesters)

*+MUSP 360 — Junior Recital

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 465 — Form and Analysis 2

Music Electives (300-level and above) 4

MUSC 471, MUSC 473, MUSE 377, MUSE 416, MUSE 479, MUSG 183, MUSG 490, MUSM 3XX (any ensemble)

FRN 101 — Beginning French I 3

FRN 102 — Beginning French II 3

GER 101 — Beginning German I 3

GER 102 — Beginning German II 3

BM: Voice 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 that they test out of.
The completion of the courses by exam will also appear on the student’s official program evaluation 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 Requirements
General Education Requirements
BM: Voice Requirements
**TOTAL PROGRAM REQUIREMENTS**

BM: Woodwind, Brasswind Track
Woodwind and brasswind students 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 bands on their principal applied instrument each fall semester (enrollment in a concert band is determined by audition).

Program Requirements
General Education
**General Education Total**

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

BM: Area Requirements
**Woodwind, Brasswind Requirements**

MUSM 400 — Student Recital
MUSP 200 — Performance Class
*MUSP 400 — Performance Class
MUSP 2XX — Private Applied
*MUSP 4XX — Private Applied
*MUSP 360 — Junior Recital
MUST 131 — Music Theory I
MUST 132 — Music Theory II
MUST 133 — Music Reading I
MUST 135 — Music Reading II
MUST 233 — Music Reading III
MUST 234 — Music Reading IV
MUST 236 — Music Theory III
MUST 237 — Music Theory IV
MUST 430 — Arranging
MUST 465 — Form and Analysis
MUSW 310 — Music Business
MUSW 483 — Comprehensive Exit Examination
Music electives - 300-level and above
MUSC 471 MUSC 473, MUSE 377, MUSE 416, MUSE 479, MUSC 183, MUSC 490, MUSM 3XX (any ensemble)

*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 program evaluation 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 Requirements
General Education
BM: Woodwind, Brasswind Requirements
**TOTAL PROGRAM REQUIREMENTS**

Bachelor of Arts - Music Major

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 bands 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.

Major Requirements

Music Major Requirements 48

MUSE 213 — Microcomputers and Music 3

**MUSG 123 — Class Piano I 4

**MUSG 124 — Class Piano II 4

**MUSG 223 — Class Piano III 3

MUSG 224 — Class Piano IV 3

MUSH 171 — Global Perspectives in Music 3

MUSH 361 — History of Music I 3

MUSH 362 — History of Music II 3

#MUSM 3XX (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 8

*MUSP 2XX — Private Applied 6

*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

General Electives - chosen from 300+ level 15

Minor 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 program evaluation 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.

*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.

Components of Degree Requirements

General Education Requirements 36
Major Requirements 48
Minor Requirements 21
General Electives 15
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Arts - Traditional Music Studies Major

The Bachelor of Arts in Traditional Music Studies provides for the study of traditional music within a liberal arts curriculum. The program is suitable for preparing students for careers in traditional music.

As it relates to the Kentucky Center for Traditional Music at Morehead State University, “traditional” music includes Bluegrass, Old Time, Ballad Singing, Blues, Celtic, Western Swing and many other related forms. The music with which we are most involved stems from, or is influenced by, the music that is identified with our southern Appalachian mountain region.

Special Admission Requirements

Entrance Auditions and Placement Assessment

All new and transfer students planning to major or minor in music must audition before the Kentucky Center for Traditional Music faculty on their principal performing instrument or voice prior to enrollment. The audition 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.

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 the history and literature of Traditional music. Resolution of any deficiency must be initiated during the first registration period.

Goals

To provide students:

1. The resources and opportunity to learn about traditional music forms and culture from both a historical and contemporary perspective using methods which encourage quality learning through discovery and inspiration.
2. Extensive performance experience.
3. The opportunity to interact with musical artists and professionals in the traditional music industry.
4. Mentoring and preparation to become well-rounded, creative, productive traditional music artists.
5. Materials and resources for research and study through the unique collections that are housed in the Traditional Music Archives, which is part of the Kentucky Center for Traditional Music.

And:

6. To simultaneously preserve and develop our art form.
7. To engage and educate the public, positively representing Kentucky’s rich cultural heritage, the Appalachian region and Morehead State University through performance and interaction with the community in the MSU service region and beyond.

Assessments

- Capstone
- Survey of graduates
- Performance recitals
- Exit interview

Program Competencies

Competencies required for successful completion of this program include:

- The ability to hear, identify and work conceptually with the elements of music such as rhythm, melody, harmony, structure, timbre and texture;
- An understanding of and the ability to read and realize musical notation as appropriate to traditional music;
- An understanding of composition processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces;
- An acquaintance with a wide selection of musical literature, the principal eras, genres and cultural sources;
- The ability to develop and defend musical judgments;
- Ability in performing areas at levels consistent with the goals and objectives of the Bachelor of Arts in Traditional Music Studies;
- Understanding of procedures for realizing a variety of musical styles; and
- Knowledge and/or skills in one or more areas of music beyond basic musicianship appropriate to the individual’s needs and interests, and consistent with the purposes of the Bachelor of Arts in Traditional Music Studies.

Program Requirements

General Education

*The following specific general education requirements must be
completed:
MUSW 499C — Senior Project  3

**General Education Total**  36

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

**Major Requirements**

**History**  12
- MUSH 171 — Global Perspectives in Music  3
- MUSH 338 — Traditional Music I  3
- MUSH 339 — Traditional Music II  3
- MUSH 340 — Traditional Music III  3

**Private Applied**  14
- MUSP 238 (a-k, v) — Traditional Private Applied (taken concurrently with MUSP 200 — Performance Class)  8
- MUSP 438 (a-k, v) — Traditional Private Applied (taken concurrently with MUSP 400 — Performance Class)  6

**Ensembles**  8
- MUSM 383 — Traditional Music Ensemble, any style  8
  (student must take private applied concurrent with ensemble)
- MUSM 200 — Student Recital (four semesters)  0
- MUSM 400 — Student Recital (four semesters)  0

**Theory**  9
- MUST 103 — Practical Theory for Traditional Music  2
- MUST 104 — Traditional Vocal Harmony  2
- MUST 345 — Aural Skills  2
- MUST 445 — Chart Writing and Application  3

**Music Business**  2
- MUSW 310 — Music Business  2

**Recording and Production**  3
- MUSW 325 — Music Recording and Sound Reinforcement  3

**Components of Degree Requirements**

**General Education Requirements**  36
**Traditional Music Studies Major Requirements**  48
**Minor**  21
**General Electives (eight of which must be at the 300+ level)**  15

**TOTAL PROGRAM REQUIREMENTS**  120

**Traditional Music Studies Minor**

**Traditional Music Studies Minor 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**
- MUSP 2XX — Private Applied Area  10

**Ensembles**  4
- MUSM 2XX/4XX — Ensembles  4

**Music Theory**  4
- MUST 103 — Practical Theory for Traditional Music  2
- MUST 104 — Traditional Vocal Harmony  2

**Music History and Literature**
- MUSH 261 — Music Listening (Folk and Country Music section)  3

**TOTAL MINOR REQUIREMENTS**  21

**Music Minor**

**Music Minor Program Requirements**
- MUSG 123 — Class Piano I  2
- MUSG 124 — Class Piano II  2
- MUSG 223 — Class Piano III or  2
- MUSG 224 — Class Piano IV  2
- MUSH 171 — Global Perspectives in Music  3
- MUSM 3XX  4

(Choose four credits from one area)
- Bands
- Choirs
- Trad/Guitar
- Orchestras
- Piano Ensembles
- Jazz Ensembles

**Music Business**  2
- MUSW 310 — Music Business  2

**Recording and Production**  3
- MUSW 325 — Music Recording and Sound Reinforcement  3

**Components of Degree Requirements**

**General Education Requirements**  36
**Traditional Music Studies Major Requirements**  48
**Minor**  21
**General Electives (eight of which must be at the 300+ level)**  15

**TOTAL MINOR REQUIREMENTS**  25

**Music Teachers National Association**

**MTNA 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.

60  Caudill College of Arts, Humanities and Social Sciences
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 PROGRAM REQUIREMENTS 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
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
MUSH 171 — Global Perspectives in Music 3
MUSH 361 — History of Music I 3
MUSH 362 — History of Music II 3
MUSE 378 — Piano Pedagogy 2
MUST 476 — Special Problems in Music 2
TOTAL PROGRAM REQUIREMENTS 52

+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.

Opportunities in Theatre

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 - Area in Theatre with Teacher Certification (P-12)

The Area in Theatre with Teaching Certification (P-12) requires a total of 90 hours. Of these hours, 48 hours are theatre course requirements.

Program Requirements

General Education
EDF 207 — Foundations of Education (SBS I) 3
EDF 211 — Human Growth & Development (SBS II) 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.

Area Requirements

Theatre Teaching Requirements 33
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, or 3
THEA 355 — Theatre History II 3

Additional Required Courses 15
THEA 375 — Creative Dramatics 3
THEA 470 — Children’s Theatre 3
COMM 495 — Administering the Communication Program

Choose two of the following (six credit hours):
THEA 321 — Stage Lighting 3
THEA 322 — Scene Design 3
THEA 326 — Costume Design 3

**Professional Education Requirements** 24
EDF 207 — Foundations of Education (SBS I) 0
EDF 211 — Human Growth and Development (SBS II) 0
EDSP 230 — Education of Exceptional Children 3
Choose one of the following (three credit hours): 3
*EDF 311 — Learning Theories and Assessment in Education or
EDEE 305 — Learning Theories and Practices in Early Elementary
Choose one of the following (three credit hours): 3
*EDSE 312 — Educational Methods and Technology or
EDEL 302 — Integrating Technology into the Classroom
*EDSE 483 — Class Organ and Mngt for Sec Teachers 3
**EDSE 416 — Student Teaching 12

Components of Degree Requirements
General Education Requirements 36
Area Requirements 48
Professional Education 24
General Electives 12
**TOTAL PROGRAM REQUIREMENTS** 120

*Admission to TEP is required to enroll in these courses.
*Application for clinical practice submitted one semester in advance to Educational Service Unit.

Bachelor of Arts - Theatre Major
Theatre Major will require 48 credit hours in theatre courses. Students in this program are also required to select a minor program of study.

Program Requirements

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.

Major Requirements

Theatre Requirements 36
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
**Theatre Elective Requirements** 12
Choose two of the following (six hours): 6

THEA 326 — Stage Lighting, 3
THEA 322 — Scene Design or 3
THEA 326 — Stage Costume Design 3
Choose two of the following (six hours): 6
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 3
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

Additional Requirements:
Annual progress meeting with the faculty

**Components of Degree Requirements**
General Education 36
Major Requirements Total 36
Theatre Electives 12
Minor and General Electives 36
**TOTAL PROGRAM REQUIREMENTS** 120

Theatre Minor

Theatre Minor Requirements
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 (three credit hours): 3
THEA 321 — Lighting.
THEA 322 — Scene Design, or
THEA 326 — Stage Costume Design

TOTAL MINOR REQUIREMENTS 24

Additional Requirements:
Annual progress meeting with the faculty

School of Humanities and Social Sciences

Department of English

Tom Williams, Chair
103 Combs Building
606-783-2741

Faculty

Program Competencies

Student Learner Outcomes:
1. Students differentiate major periods of Anglo-American Literature.
2. Students distinguish the features of major literary genres.
3. Students recognize works by major authors.
4. Students write critically about literature.
5. Students select appropriate sources for literary analysis.
6. Students synthesize sources in writing about 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
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.

Bachelor of Arts - Area in English with Teacher Certification (Secondary)

Program Requirements

General Education
ENG 211 — Introduction to World Literature I (HUM I) 3
ENG 499C — Senior Seminar in English (offered only in fall) 3

General Education Total 36

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

Area Requirements

Literature Cornerstone 3
Complete the following course:
ENG 300 — Introduction to the Study of Literature in English (offered only in spring)

Literature Surveys 12
Complete the following four courses:
ENG 331 — British Literature to 1789
ENG 332 — British Literature since 1789
ENG 341 — American Literature to 1865
ENG 342 — American Literature since 1865

Linguistics I 3
Select one course from the following:
ENG 305 — Introduction to Linguistics
ENG 315 — Structure of English
ENG 404 — Advanced Syntax

Linguistics II 3
Select one course from the following:
ENG 393 — History of the English Language
ENG 394 — Language and Society
ENG 401 — Semantics

Writing I 3
Select one course from the following:
ENG 390 — Professional Writing
ENG 391 — Advanced Expository Writing
CVM 401 — Advanced Multimedia News
CVM 465 — Opinion Writing

Writing II 3
Select one course from the following:
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
CVM 358 — Sports Writing

English Language Arts Pedagogy 12
Complete the following four courses below:
ENG 280 — Intro to Teaching English in Secondary
Bachelor of Arts - English Major

Program Requirements

General Education
ENG 499C — Senior Seminar in English (offered only in fall) 3

General Education Total 36

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

Major Requirements

Literature Cornerstone 3
Complete the following course:
ENG 300 — Introduction to the Study of Literature in English (offered only in spring)

Literature Surveys 12
Complete the following four courses:
ENG 331 — British Literature to 1789
ENG 332 — British Literature since 1789
ENG 341 — American Literature to 1865
ENG 342 — American Literature since 1865

Linguistics 3
Select one course from the following:
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 — Advanced Syntax

Writing I 3
Select one course from the following:
ENG 390 — Professional Writing
ENG 391 — Advanced Expository Writing

Writing II 3
Select one course from the following:
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 12
Cultural Diversity - Select one course from the following: 3
*Foreign Language
*Three semester hours in one foreign language above the first semester level, e.g., French, Spanish, German, Italian, Latin or Russian.

Components of Degree Requirements

General Education 36
Area Requirements 81
Supplemental Requirements 3
TOTAL PROGRAM REQUIREMENTS 120
ENG 442 — Romantic Writers
ENG 443 — Victorian Writers
ENG 444 — British Literature since 1901
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 — The British 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

Supplemental Requirement 3
*Foreign Language (one course above 101-level in any foreign language)
*Three semester hours in a foreign language above the first semester level, e.g., French, Spanish, German, Italian, Latin or Russian.

Components of Degree Requirements
General Education 36
Major Requirements 39
Supplemental Requirements 3
Minor 21
General Electives 21
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Fine Arts - Creative Writing Major

Student Learning Outcomes
1. Students create original works of fiction.
2. Students create original poems.
3. Students create original essays.
4. Students critique peers’ work.
5. Students critique their own work.
6. Students evaluate submissions to a literary journal.
7. Students design literary journal content.

Assessment Procedures
- Survey of graduates
- Portfolio
- Annual assessment of original works of creative writing via a cumulative portfolio
- Yearly progress reports

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).

Program Requirements

General Education
CRW 499C — Senior Thesis 3
General Education Total 36
Refer to the General Education section for a complete listing of general education requirements for the University.

Major Requirements

Creative Writing Requirements 18
ENG 395 — Poetry Writing 3
ENG 396 — Fiction Writing 3
ENG 397 — Writing Creative Nonfiction 3
Select three courses from the following: 9
ENG 483 — Advanced Poetry Writing,
ENG 484 — Advanced Fiction Writing,
ENG 485 — Advanced Nonfiction Writing, or
THEA 412 — Playwriting

Literature Cornerstone 3
ENG 300 — Introduction to the Study of Literature in English (offered only in spring)

Literature Surveys 9
Select three of the following:
ENG 331 — British Literature to 1789,
ENG 332 — British Literature since 1789,
ENG 341 — American Literature to 1865, or
ENG 342 — American Literature since 1865

Literature and Linguistics electives 9
Select three of the following, no more than one course from a specific area:

Linguistics (choose one)
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 — Advanced Syntax

Cultural Diversity (choose one)
ENG 311 — Global English Literature
ENG 320 — Women Writers and Feminist Perspectives
ENG 348 — African-American Literature
ENG 360 — Appalachian Literature
ENG 365 — Literature of the South
ENG 398 — Gay and Lesbian Literature

**Literary Period (choose one)**
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 Lit
ENG 442 — Romantic Writers
ENG 443 — Victorian Writers
ENG 444 — British Literature since 1901

**Major Author (choose one)**
ENG 435 — Shakespeare
ENG 495 — Seminar: Major Writers

**Genre (choose one)**
ENG 344 — The Short Story and the Novel
ENG 432 — The British 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

**Supplemental Requirements**
Foreign Language (one course above 101-level in any foreign language)
ENG 293 — Introduction to Creative Writing

**Components of Degree Requirements**
General Education 36
Major Requirements 39
Supplemental Requirements 6
Minor 21
General Electives 18

**TOTAL PROGRAM REQUIREMENTS** 120

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**English Minor Requirements**

**American Literature Surveys (select one)**
ENG 341 — American Literature to 1865
ENG 342 — American Literature since 1865

**British Literature Surveys**
ENG 331 — British Literature to 1789
ENG 332 — British Literature since 1789

**Linguistics (select one)**
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 — Advanced Syntax

**Writing (select one)**
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
THEA 412 — Playwriting

**Electives**
Literature electives (300-400 level courses)
Additional electives from 300-400 level courses in literature, linguistics, or foreign languages

**TOTAL MINOR REQUIREMENTS** 24

The minor in English does not include the general education requirements in composition (six semester hours). ENG 293 is required for the minor.

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**Creative Writing Minor**

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

**Creative Writing Minor Requirements**

**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

**Electives**
Literature electives (300-400 level courses) 3
Additional electives from 300-400 level courses in literature, linguistics, or foreign languages 6

**TOTAL MINOR REQUIREMENTS** 21

The minor in creative writing does not include the general education requirements in composition (six semester hours). ENG 293 is required for the minor.

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**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 which language is of central importance, including careers in education, law, communications, foreign language, translation, journalism, technical writing, psychology, anthropology and speech pathology.

**Linguistics Minor Requirements**

**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 — Advanced Syntax

**Electives**

**TOTAL MINOR REQUIREMENTS** 15
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 412 — Symbolic Logic

**TOTAL MINOR REQUIREMENTS** 21

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

**Literature Minor**

**Literature Minor Requirements**

**American or British Literature** 6
ENG 435 — Shakespeare 3
*Select one of the following:* 3
ENG 331 — British Literature to 1789
ENG 332 — British Literature since 1789
ENG 341 — American Literature to 1865
ENG 342 — American Literature since 1865

**Literature and literary criticism** 9
*Select three electives from 300-400 level courses in literature*

**Philosophy** 3
*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** 3
*Select one of the following courses:*
HST 260 — American History to 1865
HST 261 — American History since 1865
HST 313 — The Renaissance and Reformation
HST 316 — England to 1688
HST 317 — England since 1688
HST 343 — Religion in American History
HST 354 — The Old South

**TOTAL MINOR REQUIREMENTS** 21

The minor in literature does not include the general education requirements in composition (six hours).
HST 380 — Junior Seminar (offered Fall semester only) 3
HST 3XX — Elective in History 3
Foreign Language 3

Additional Constraints:
Students are permitted to use only one course in the program from each of the following pairs:
1. HST 352 — History of Appalachia or HST 353 — History of Kentucky
2. HST 341 — American Frontier or HST 342 — Native American History

Components of Degree Requirements

<table>
<thead>
<tr>
<th>General Education</th>
<th>Major Requirements</th>
<th>Minor</th>
<th>Total Electives</th>
<th>TOTAL PROGRAM REQUIREMENTS</th>
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</thead>
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</tr>
<tr>
<td>36</td>
<td>36</td>
<td>21-24</td>
<td>24-27</td>
<td>120</td>
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</tbody>
</table>

History Minor

History Minor Requirements

HST 260 — American History to 1865 3
HST 261 — American History since 1865 3
HST 270 — World History to 1500 3
HST 271 — World History since 1500 3
HST 3xx — Electives in History 15

TOTAL MINOR REQUIREMENTS 27

Students are permitted to use only one course in the program from each of the following pairs:
1. HST 352 — History of Appalachia or HST 353 — History of Kentucky
2. HST 341 — American Frontier or HST 342 — Native American History

Legal Studies

The Legal Studies Program offers options for students interested in careers in law-related occupations, such as paralegal, or who plan to pursue a law degree in law school, or students who plan to work in career fields where knowledge of law and legal procedures will be valuable, such as government, healthcare, banking, social work and most areas of business. The legal studies major and area degree prepares students with the career competencies to work as a professional paralegal and is approved by the American Bar Association (ABA). Only about 25 percent of paralegal programs are approved by the ABA. The legal studies minor is an excellent complement to other majors, but is not intended to fully prepare students as paralegals, and therefore, the minor is not approved by the ABA.

Students wishing to pursue law school can select from a variety of majors and minors, including legal studies. Those who choose a major other than legal studies are strongly encouraged to consider the legal studies minor. The legal studies instructors are attorney-professors and the pre-law advisors for all MSU students interested in pursuing law school. They provide information about the law school admissions process, including the Law School Admissions Test (LSAT), and legal career opportunities.

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 and updated primary and secondary resources using electronic databases, the Internet, and print materials.
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

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, 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 Bachelor of Arts in Legal Studies is designed to equip graduates with the appropriate applied and theoretical knowledge of law and procedure to successfully assist lawyers in providing legal services to clients. The major and area combines the advantages of a liberal arts education with the development of the professional legal skills needed to assist attorneys in law offices, 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 B.A. degree in Legal Studies 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.

The legal studies degree is approved by the American Bar Association.

Bachelor of Arts - Area in Legal Studies

Program Requirements

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.

Area Requirements

Legal Studies Requirements 48
PLS 210 — Introduction to Law and Ethics 3
PLS 321 — Legal Research and Writing I 3
PLS 325 — Pretrial Practice 3
PLS 332 — Property Law 3
PLS 334 — Torts, Personal Injury Litigation and Insurance Law 3
PLS 335 — Contracts and the Uniform Commercial Code 3
PLS 340 — Criminal Law and Procedure 3
PLS 490 — Paralegal Internship 3-6
Electives: Choose six hours from the following approved electives. At least three hours must be from courses with a PLS prefix.

Legal Studies Minor Requirements

Bachelor of Arts - Legal Studies Major

Program Requirements

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.

Major Requirements

Legal Studies Major Requirements 36-39
PLS 210 — Introduction to Law and Ethics 3
PLS 321 — Legal Research and Writing I 3
PLS 421 — Legal Research and Writing II 3
PLS 325 — Pretrial Practice 3
PLS 425 — Trial Practice 3
PLS 332 — Property Law 3
PLS 334 — Torts, Personal Injury Litigation and Insurance Law 3

Legal Studies Minor

The legal studies minor is available to all MSU students except students majoring in legal 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 minor is not part of the ABA approval for the legal studies program.

Legal Studies Minor Requirements

PLS 321 — Legal Research and Writing I 3
PLS 325 — Pretrial Practice 3
PLS 332 — Property Law 3
PLS 334 — Torts, Personal Injury Litigation and Insurance Law 3
PLS 335 — Contracts and the Uniform Commercial Code 3
PLS 340 — Criminal Law and Procedure 3
Electives: Choose six hours from the following list (at least one elective course must have a PLS prefix)

PLS 333 — Family Law
PLS 436 — Wills, Trusts and Estates
PLS 337 — Corporate Law
PLS 360 — Paralegal Specialty Course
GOVT 303 — Comparative Constitutional Law and Politics
GOVT 321 — Constitutional Law; Government Powers
GOVT 322 — Courts and Civil Liberties
GOVT 324 — Environmental Law and Policy

**TOTAL MINOR REQUIREMENTS** 24

**Philosophy/Religious Studies**

**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.

**Bachelor of Arts - Area in Philosophy**

**Program Requirements**

**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.*

**Area Requirements**

**Philosophy Core Requirements** 24

PHIL 100 — Beginning Philosophy 3
PHIL 106 — Beginning Logic 3
PHIL 303 — Ethics 3
PHIL 355 — Ancient and Medieval Philosophy 3
PHIL 356 — Modern and Contemporary Philosophy 3
PHIL 400 — Philosophy of Science 3
PHIL 420 — Metaphysics 3
PHIL 430 — Epistemology 3

**Area: Philosophy Track**

**Philosophy Track Requirements** 24

*Choose eight courses from the following:*

PHIL 307 — Philosophy of Religion
PHIL 308 — Philosophy of the Arts

**Components of Degree Requirements**

General Education 36
Area and Track Requirements 48
General Electives 36

**TOTAL PROGRAM REQUIREMENTS** 120
# Bachelor of Arts - Philosophy Major

## Program Requirements

### 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.*

### Major Requirements

**Philosophy Core Requirements**  
15

- PHIL 100 — Beginning Philosophy  
3
- PHIL 106 — Beginning Logic  
3
- PHIL 303 — Ethics  
3
- PHIL 355 — Ancient and Medieval Philosophy  
3
- PHIL 356 — Modern and Contemporary Philosophy  
3

### Major: Philosophy Track

**Philosophy Track Requirements**  
15

*Choose two of the following:*

- PHIL 400 — Philosophy of Science,  
- PHIL 403 — Ethical Theory,  
- PHIL 420 — Metaphysics, or  
- PHIL 430 — Epistemology

*Choose three courses from Group A*  
9

- PHIL 307 — Philosophy of Religion  
- PHIL 308 — Philosophy of the Arts  
- 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 and 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 412 — Symbolic Logic  
- PHIL 420 — Metaphysics  
- PHIL 430 — Epistemology  
- PHIL 476 — Special Problems*

### Major: Religious Studies Track

**Religious Studies Track Requirements**  
15

- PHIL 307 — Philosophy of Religion  
3
- PHIL 320 — Eastern Philosophy  
3

*Choose three courses from Group B*  
9

- ART 263 — World Arts  
- ART 264 — Art History II  
- ART 362 — Medieval Art  
- ART 363 — Renaissance Art  
- ART 467 — Native American Art  
- GEO 370 — Geography of World Religions  
- HST 270 — World History to 1500  
- HST 312 — Medieval Europe  
- HST 313 — The Renaissance and Reformation  
- HST 321 — The Middle East  
- HST 343 — Religion in American History  
- HON 200 — Interdisciplinary Honors Core I: The Ancient World  
- HON 205 — Interdisciplinary Honors Core II: The Medieval World  
- HUM 203 — Introduction to Medieval Culture  
- HUM 305 — Good and Evil  
- PHIL 399 — Special Courses  
- PHIL 403 — Ethical Theory  
- PHIL 476 — Special Problems*  
- REL 221 — World Religions I  
- REL 222 — World Religions II  
- 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 an area, major or minor.*

### Components of Degree Requirements

- General Education  
36
- Major Requirements  
30
- Minor  
21
- General Electives  
33

**TOTAL PROGRAM REQUIREMENTS**  
120

### Philosophy Minor

**Philosophy Minor Requirements**

- PHIL 100 — Beginning Philosophy  
3
- PHIL 106 — Beginning Logic  
3
- PHIL 355 — Ancient and Medieval Philosophy  
3
- PHIL 356 — Modern and Contemporary Philosophy  
3

*Choose three courses from Group A*  
9

- PHIL 307 — Philosophy of Religion  
- PHIL 308 — Philosophy of the Arts  
- 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 and 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 412 — Symbolic Logic  
- PHIL 420 — Metaphysics  
- PHIL 430 — Epistemology  
- PHIL 476 — Special Problems*

**TOTAL MINOR REQUIREMENTS**  
21
* No more than three hours of either PHIL 476 or REL 476 can count toward the fulfillment of the requirements for an area, major or minor.

Religious Studies Minor

Religious Studies Minor Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PHIL 106</td>
<td>Beginning Logic</td>
<td>3</td>
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<tr>
<td>PHIL 307</td>
<td>Philosophy of Religion</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 320</td>
<td>Eastern Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 341</td>
<td>Philosophy and Death</td>
<td>3</td>
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</table>

Choose four courses from Group B 12

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<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 362</td>
<td>Medieval Art</td>
</tr>
<tr>
<td>ART 363</td>
<td>Renaissance Art</td>
</tr>
<tr>
<td>ART 467</td>
<td>Native American Art</td>
</tr>
<tr>
<td>GEO 370</td>
<td>Geography of World Religions</td>
</tr>
<tr>
<td>HST 270</td>
<td>World History to 1500</td>
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<tr>
<td>HST 312</td>
<td>Medieval Europe</td>
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<td>HST 343</td>
<td>Religion in American History</td>
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<td>HON 200</td>
<td>Interdisciplinary Honors Core I: The Ancient World</td>
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<td>HON 205</td>
<td>Interdisciplinary Honors Core II: The Medieval World</td>
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<tr>
<td>HUM 203</td>
<td>Introduction to Medieval Culture</td>
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<td>Philosophy of Science</td>
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<td>PHIL 476</td>
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<td>REL 321</td>
<td>Early and Medieval Christian Thought</td>
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<td>REL 322</td>
<td>Modern Christian Thought</td>
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<td>REL 323</td>
<td>20th Century Christian Thought</td>
</tr>
<tr>
<td>REL 476</td>
<td>Special Problems*</td>
</tr>
</tbody>
</table>

Total Minor Requirements 24

* No more than three hours of either PHIL 476 or REL 476 can count toward the fulfillment of the requirements for an area, major or minor.

Social Studies

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 - Area in Social Studies with Teacher Certification (Secondary)

The area 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 nonteaching 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.

Program Requirements

General Education

- **HST 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.

Area Requirements

Social Studies Requirements 60

- HST 260 American History to 1865 3
- HST 261 American History since 1865 3
- HST 271 World History since 1500 3
- HST 300 — Practicing History 3
- HST 301 — HST 306 or HST 351 or HST 352 3
- HST 312 — HST 320 or HST 372 3
- HST 321 — HST 326 or HST 311 or HST 375 3
- HST 342 — HST 347 or HST 349 3

Geography 15

- GEO 103 — Physical Geography
- GEO 201 — Map Interpretation and Analysis
- GEO 300 — World Geography

Six-hours electives from GEO
**Government**
GOVT 141 — United States Government  
GOVT 180 — Introduction to Political Theory or  
GOVT 242 — State and Local Government or  
GOVT 230 — Introduction to Comparative Politics  
GOVT 300-349 (Choose one)  
GOVT 360-368 (Choose one)

**Economics**
ECON 101 — Introduction to Economics  
ECON 201 — Principles of Macroeconomics or  
ECON 202 — Principles of Microeconomics

**Professional Education Requirements**
EDF 207 — Foundations of Education  
EDF 211 — Human Growth and Development  
EDSP 230 — Education of Exceptional Children  
EDF 311 — Learning Theories and Assessment  
EDSE 312 — Educational Methods and Technology  
EDSE 483 — Classroom Organization and Mngt. for Secondary Teachers  
EDSE 416 — Clinical Practice

Note: Refer to the College of Education for information on application to the Teacher Education Program and application for Clinical Practice.

**Economics**
ECON 101 — Introduction to Economics  
ECON 201 — Principles of Macroeconomics or  
ECON 202 — Principles of Microeconomics

**Professional Education Requirements**
EDF 207 — Foundations of Education  
EDF 211 — Human Growth and Development  
EDSP 230 — Education of Exceptional Children  
EDF 311 — Learning Theories and Assessment  
EDSE 312 — Educational Methods and Technology  
EDSE 483 — Classroom Organization and Mngt. for Secondary Teachers  
EDSE 416 — Clinical Practice

Note: Refer to the College of Education for information on application to the Teacher Education Program and application for Clinical Practice.

**Components of Degree Requirements**
| General Education | 36 |
| Area Requirements  | 60 |
| Professional Education Requirements | 30 |

**TOTAL PROGRAM REQUIREMENTS**
126

**French Major Requirements**
FRN 101 — Beginning French I  
FRN 102 — Beginning French II  
FRN 201 — Intermediate French  
FRN 202 — Conversation and Composition  
FRN 301 — Advanced Grammar and Composition  
FRN 302 — Advanced Phonetics and Conversation  
FRN 303 — Survey of French Literature I  
FRN 304 — Survey of French Literature II  
Electives above FRN 202

*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 Requirements
General Education 36
Major Requirements 30
Minor 21
Free Electives 33
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Arts - French Major with Teacher Certification (P-12)

Program Requirements

General Education
FRN 499C — Senior Colloquium in French 3

General Education Total 36

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

Major Requirements

French Major Teaching Requirements 36
*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

Requirements for P-12 Certification

Professional Education Requirements 30
EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment 3
EDS 312 — Educational Methods and Technology 3
EDS 483 — Classroom Organ and Mgt for Sec Tchrs 3
EDSE 230 — Education of Exceptional Children 3
EDSE 416 — Clinical Practice 12

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.

Students will need to take another general education course to fill the HUM requirement.
Region of Expertise - Choose one track.

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<thead>
<tr>
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<td>CHI 300 — Chinese Literature and Society</td>
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<td>GEO 383 — Asia</td>
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<td>GOVT 337 — Politics of Asia</td>
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<td>GOVT 334 — Russia and Eastern European Governments</td>
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<td>HST 319 — The Russian Empire</td>
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<td>HST 324 — Modern China</td>
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<td>HST 325 — Japanese Civilization</td>
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<td>HST 375 — Twentieth Century Asian Wars</td>
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<th>Track 2 — Latin American Region</th>
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<td>ART 464 — Spanish, Portuguese and Latin American Art</td>
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<td>GEO 320 — Latin America</td>
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<td>GEO 326 — Cuba and the Caribbean</td>
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<td>GOVT 332 — Politics of Latin America and the Caribbean</td>
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<td>HST 326 — Latin American History</td>
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<td>SPA 306 — Latin American Culture and Civilization</td>
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<tr>
<td>ART 481 — German Art of the 20th Century</td>
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<td>FRN 203 — Introduction to France</td>
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<td>FRN 205 — French Culture and Civilization</td>
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<td>GEO 331 — Europe</td>
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<td>GOVT 330 — Parliamentary Democracies</td>
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<td>HST 320 — Modern Germany</td>
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<td>SPA 304 — Spanish Culture and Civilization</td>
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<thead>
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<th>Track 4 — Africa and the Middle East Region</th>
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<td>GEO 328 — Africa</td>
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<tr>
<td>GEO 385 — The Middle East</td>
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<tr>
<td>GOVT 331 — Politics of the Middle East and North Africa</td>
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<td>HST 321 — The Middle East</td>
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<tr>
<td>HST 322 — African History</td>
<td></td>
</tr>
<tr>
<td>IST 312 — Culture of Islamic Africa</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Track 5 — Global Issues</th>
<th>12</th>
</tr>
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<tbody>
<tr>
<td>ART 482 — Contemporary World Art</td>
<td></td>
</tr>
<tr>
<td>CRIM 316 — Global Crime and Terrorism</td>
<td></td>
</tr>
<tr>
<td>ENG 211 — Introduction to World Literature I</td>
<td></td>
</tr>
<tr>
<td>GEO 311 — Geography of the Global Economy</td>
<td></td>
</tr>
<tr>
<td>GOVT 362 — Current World Problems</td>
<td></td>
</tr>
<tr>
<td>GOVT 364 — International Relations</td>
<td></td>
</tr>
<tr>
<td>HST 346 — United States Foreign Relations</td>
<td></td>
</tr>
</tbody>
</table>

GOVT 230 — Comparative Politics
HST 271 — World History since 1500

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.

NURS 345 — Global Health

Components of Degree Requirements
General Education 36
Major Core Requirements 18
Track and Supplemental Requirements 21
Minor 21
Free Electives 24
TOTAL PROGRAM REQUIREMENTS 120

Interdisciplinary International Studies Minor
Adrian Mandzy, Coordinator
317 Rader Hall
606-783-9369

The purpose of the Interdisciplinary International Studies (IST) minor is to provide students with an understanding of the complex relationships that exist in the world today between nations 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.

IIS Minor Requirements
Core Requirements 7
IST 101 — Introduction to International Studies
IST 301 — International Studies Study Abroad
IST 401 — Seminar in International Studies
Electives
Additional courses equated in International Studies

Foreign Language Competency
Six hours of study in one foreign language or its equivalent as approved by the associate dean for international education.

TOTAL MINOR REQUIREMENTS

Equated courses currently approved in the minor include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST/HST 271</td>
<td>World History since 1500</td>
<td>3</td>
</tr>
<tr>
<td>IST/AGR 204</td>
<td>World Food</td>
<td>3</td>
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<tr>
<td>IST/FRN 205</td>
<td>French Culture and Civilization</td>
<td>3</td>
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<tr>
<td>IST 206/FRN 206</td>
<td>Business French</td>
<td>3</td>
</tr>
<tr>
<td>IST/ENG 211</td>
<td>Introduction to World Literature I</td>
<td>3</td>
</tr>
<tr>
<td>IST/ENG 212</td>
<td>Introduction to World Literature II</td>
<td>3</td>
</tr>
<tr>
<td>IST/REL 221</td>
<td>World Religions I</td>
<td>3</td>
</tr>
<tr>
<td>IST/REL 222</td>
<td>World Religions II</td>
<td>3</td>
</tr>
<tr>
<td>GEO 241</td>
<td>United States and Canada</td>
<td>3</td>
</tr>
<tr>
<td>IST/ART 263</td>
<td>Art History I</td>
<td>3</td>
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<tr>
<td>IST/ART 264</td>
<td>Art History II</td>
<td>3</td>
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<tr>
<td>IST/ART 265</td>
<td>Art History III</td>
<td>3</td>
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<tr>
<td>IST/GEO 300</td>
<td>World Geography</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 331</td>
<td>Politics of the Middle East and North America</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 332</td>
<td>Politics of Latin America and the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 333</td>
<td>Politics of Sub-Saharan Africa</td>
<td>3</td>
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<tr>
<td>IST/SOC 305</td>
<td>Cultural Anthropology</td>
<td>3</td>
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<tr>
<td>GOVT 364</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 367</td>
<td>Politics of Intern Econ Relations</td>
<td>3</td>
</tr>
<tr>
<td>IST/GEO 310</td>
<td>Australia</td>
<td>3</td>
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<tr>
<td>IST/GEO 311</td>
<td>Geography of the Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>IST 321/PHIL 320</td>
<td>Eastern Philosophy</td>
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<tr>
<td>IST 324/GEO 370</td>
<td>Geography of World Religions</td>
<td>3</td>
</tr>
<tr>
<td>IST/GEO 328</td>
<td>Africa</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 329</td>
<td>North Amer Politics: US &amp; Canada</td>
<td>3</td>
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<tr>
<td>IST 330</td>
<td>Perspectives on Canada</td>
<td>3</td>
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<tr>
<td>IST/HST 327</td>
<td>History of Canada</td>
<td>3</td>
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<td>IST 332</td>
<td>First Nations of Canada</td>
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<tr>
<td>IST 333</td>
<td>Govt and Politics of Britain and Canada</td>
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<tr>
<td>GOVT 303</td>
<td>Comp Const Law &amp; Politics</td>
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<tr>
<td>IST 335</td>
<td>Political Econ and Envir Policy in Canada</td>
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<tr>
<td>IST 336</td>
<td>Politics of the American Auto Industry</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 337</td>
<td>Politics of Asia</td>
<td>3</td>
</tr>
<tr>
<td>GOVT 334</td>
<td>Russia and East European Govt</td>
<td>3</td>
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<tr>
<td>IST/SPA 304</td>
<td>Spanish Culture and Civilization</td>
<td>3</td>
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<tr>
<td>IST/SPA 306</td>
<td>Latin American Cult and Civil</td>
<td>3</td>
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<td>IST/NAHS 345</td>
<td>Global Health</td>
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<tr>
<td>IST/COMS 350</td>
<td>Comm, Culture and Diversity</td>
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<tr>
<td>IST/HST 316</td>
<td>England to 1688</td>
<td>3</td>
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<tr>
<td>IST/HST 317</td>
<td>England since 1688</td>
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<tr>
<td>IST 353/HST 318</td>
<td>Russia to 1917</td>
<td>3</td>
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<tr>
<td>IST 354/HST 319</td>
<td>Russia since 1917</td>
<td>3</td>
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<tr>
<td>IST 355/HST 320</td>
<td>Modern Germany</td>
<td>3</td>
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<tr>
<td>IST 358/HST 372</td>
<td>Revolutionary Europe</td>
<td>3</td>
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<tr>
<td>IST 359/HST 314</td>
<td>19th Century Europe</td>
<td>3</td>
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<tr>
<td>GOVT 360</td>
<td>United Nations and World Organizations</td>
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<tr>
<td>IST/HST 315</td>
<td>20th Century Europe</td>
<td>3</td>
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<tr>
<td>GOVT 362</td>
<td>Current World Problems</td>
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<tr>
<td>GOVT 368</td>
<td>Human Rights and Global Justice</td>
<td>3</td>
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<tr>
<td>IST/HST 322</td>
<td>African History</td>
<td>3</td>
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<tr>
<td>IST/HST 323</td>
<td>Traditional China</td>
<td>3</td>
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<tr>
<td>IST/HST 324</td>
<td>Modern China</td>
<td>3</td>
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<td>IST/HST 325</td>
<td>Japanese Civilization</td>
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<tr>
<td>IST/HST 321</td>
<td>The Middle East</td>
<td>3</td>
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<tr>
<td>IST/HST 326</td>
<td>Latin American History</td>
<td>3</td>
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<tr>
<td>IST/GEO 383</td>
<td>Asia</td>
<td>3</td>
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<tr>
<td>IST/MGT 409</td>
<td>International Management</td>
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<tr>
<td>IST 430</td>
<td>Canadian Parliament Internship</td>
<td>3</td>
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<tr>
<td>IST/ECON 447</td>
<td>International Economics</td>
<td>3</td>
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<tr>
<td>IST/MKT 469</td>
<td>International Marketing</td>
<td>3</td>
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<tr>
<td>IST/ART 481</td>
<td>German Art of the 20th Century</td>
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</tr>
<tr>
<td>IST/ART 482</td>
<td>Contemporary World Art</td>
<td>3</td>
</tr>
</tbody>
</table>

For additional information on the interdisciplinary minor in international studies, contact the coordinator at 606-783-9369.

Study Abroad

Morehead State University offers undergraduate 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, the student may apply for 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 England, Scotland, Ireland, New Zealand, Australia, Barbados and Kenya 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 each spring in Dublin and London. Students can earn from three to six credit hours depending upon 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 France, Austria, Italy, Greece, Spain, Brazil, Cameroon, China, Costa Rica, Denmark, Ecuador, Germany, Japan, Mexico, Thailand, Myanmar (Burma) 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 and Austria. Opportunities to have internships while attending classes are also available.

Additional information about any study abroad opportunity may be obtained by visiting the international education website: www.moreheadstate.edu/oie.
Spanish

Spanish Faculty
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 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 - Spanish Major

Program Requirements

General Education
SPA 499C — Senior Seminar in Spanish 3

General Education Requirements 36

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

Major Requirements

Spanish Major Requirements 30
*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

*Students will need to take another general education course to fulfill the HUM requirement.

Components of Degree Requirements

General Education 36
Major Requirements 30
Minor 21
Free Electives 33
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Arts - Spanish Major with Teacher Certification (P-12)

Program Requirements

General Education
SPA 499C — Senior Seminar in Spanish 3

General Education Requirements 36

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

Major Requirements

Spanish Teaching Requirements 36
*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

Professional Education Requirements 30
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
EDSE 416 — Clinical Practice 12

*Students will need to take another general education course for the HUM requirement.
Components of Degree Requirements

General Education 36
Major Requirements 36
Professional Education Requirements 30
Minor 21
**TOTAL PROGRAM REQUIREMENTS** 123

Spanish Minor

**Spanish Minor Requirements**

**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**
SPA 300 — Grammar and Composition

**Approved 300-400 level electives** 3

**TOTAL MINOR REQUIREMENTS** 21

For questions, contact the department chair, Dr. Philip Krummrich, at 606-783-2726 or via email at p.krummrich@moreheadstate.edu. It is strongly recommended that Spanish be taken in the freshman year and without interruption.

*Note: 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.*

Appalachian Studies Minor

**Appalachian Studies Faculty**


**Appalachian Studies Minor Requirements**

**Core Requirements** 18
APS 201 — Introduction to Appalachian Studies

**Choose five of the following (15 credit hours):**
ART 468 — Appalachian Arts
ENG 360 — Appalachian Literature
GEO 341 — Appalachia
HST 352 — History of Appalachia
MUST 104 — Traditional Vocal Harmony
SOC 459 — Appalachian Culture

**Electives** 6

*Choose two three-credit hour courses (may include courses not already selected above):*
AGR 319 — Herbs

**TOTAL MINOR REQUIREMENTS** 22

Chinese, German, Italian, Latin

For questions, contact 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

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 email at p.krummrich@moreheadstate.edu.
## Film Studies Minor Requirements

**Core Courses**
- FLM 170 — Introduction to Film
- FLM 270 — Film History
- FLM 470 — Film Theory
- CVM 485 — Narrative Video Production

**Global Cinema**
- 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**
- CVM 320 — Feature and Documentary Writing,
- CVM 481 — Documentary Production,
- CVM 483 — Animation Production,
- ENG 470 — Film and Literature,
- FLM 399 — Special Topics (may be taken more than once for credit if topic varies), or
- THEA 284 — Acting Techniques

**TOTAL MINOR REQUIREMENTS**
- 21

*Note: No prerequisite is required for CVM 485, FRN 404, SPA 309, CVM 481 and CVM 320 if taken as part of the film studies minor.*

## Geography Minor

**Geography Faculty**
- R. Berglee, V. Craig, J. Holcomb, G. Odell, E. Ratajeski

The Department of International and Interdisciplinary Studies offers a 21 hour minor in geography.

Appropriate educational experiences and training are provided to prepare persons for entry into careers in public and private sector business and industry, government service, planning and resource management.

Geography — by its very nature — has a global perspective, and most of the courses offered contribute to students' understanding of the diversity of human cultures on the planet.

**Geography Minor Requirements**
- GEO 100 — Fundamentals of Geography
- GEO 103 — Physical Geography
- GEO 201 — Map Interpretation and Analysis
- GEO 241 — United States and Canada
- Three GEO electives

**TOTAL MINOR REQUIREMENTS**
- 21

## George M. Luckey Academic Honors Program

**Dr. Philip Krummrich, Director**

Honors House
606-783-2807

To complete the Academic Honors Program, students must complete the following courses:
- HON 100 — Introduction to Honors
- HON 200 — Interdisciplinary Honors Core I: The Ancient World
- HON 205 — Interdisciplinary Honors Core II: The Medieval World

## Interdisciplinary Women's Studies Minor

**Ann Andaloro, Director**

303F Breckinridge Hall
606-783-2714

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 society.
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 regarding their choices in families, politics, work and leisure.

**Interdisciplinary Women's Studies Minor Requirements**

**Required Courses**

**6**

- WST 273 — Introduction to Women's Studies
- WST 490 — Integrative Capstone in Women's Studies
Department of Military Science

Lieutenant Colonel Robert Mason, Chair
Button Auditorium
606-783-5225

Faculty
Mr. Matt Chapman, CPT Eric Green, LTC Robert Mason (Chair), MSG David A. Osborne, SFC Chris Scarlet

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 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**

**Military Science Minor Requirements**

*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
- **MS 101A** — Leadership Laboratory, 3
- **MS 102** — Introduction to Leadership; and
- **MS 102A** — Leadership Laboratory, 3
- **MS 201** — Self/Team Development; and
- **MS 201A** — Leadership Laboratory, 3
- **MS 202** — Individual/Team Military Tactics; and
- **MS 202A** — Leadership Laboratory, 3
- **MS 301** — Leading Small Organizations I; and
- **MS 301A** — Advanced Leadership Laboratory, 3
- **MS 302** — Leading Small Organizations II; and
- **MS 302A** — Advanced Leadership Laboratory, 3
- **MS 401** — Leadership Challenges and Goal Setting; and
- **MS 401A** — Advanced Leadership Laboratory, 3
- **MS 402** — Transition to Lieutenant; and
- **MS 402A** — Advanced Leadership Laboratory, 3
- **MS 339** — Cooperative Education in Military Leadership (required to commission as a 2nd Lieutenant, 3

Electives of particular interest and value to military science as approved by military science advisor (300-level courses or above).

**TOTAL MINOR REQUIREMENTS** 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.

**Department of Sociology, Social Work and Criminology**

Clarenda Phillips, Chair
355 Rader Hall  
606-783-2551

Social Work Faculty

Sociology and Criminology Faculty

**Social Work**

**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 wellbeing 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.

Caudill College of Arts, Humanities and Social Sciences 81
Assessment Procedures
Surveys of graduates
Employer Survey

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 personal statement 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 60 credit hours of the required pre-social work courses as listed on the curriculum map;
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.

Bachelor of Social Work (BSW)
Social work is a human service profession that assists the needs of society in several areas, including gerontology, healthcare, 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.

Program Requirements

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.

Area Requirements

Social Work Area Requirements 60
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 credit 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 380, SWK 381, SWK 399, SWK 400, SWK 416, SWK 420, SWK 435, SWK 441, SWK 445, SWK 458, SWK 470, SWK 471, SWK 472, SWK 473, SWK 474, CRIM 317 or CRIM 345

Supplemental Requirements 3
SOC 374 — American Minority Relations 3

Components of Degree Requirements

General Education Requirement 36
Area Requirements 60
Supplemental Requirements 3
General Electives 21
TOTAL PROGRAM REQUIREMENTS 120
Chemical Dependency Counseling Minor

The Chemical Dependency minor is designed to meet the 270-classroom hours requirement for the Kentucky Alcohol and Drug Abuse Certification Board for individuals who plan to pursue certification as an alcohol and drug counselor. The courses in the minor are approved by the Kentucky Alcohol and Drug Certification Board.

Admission Requirements

Minimum 2.5 GPA

Chemical Dependency Counseling Minor Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK 470 — Introduction to Substance Abuse Counseling</td>
<td>3</td>
</tr>
<tr>
<td>SWK 471 — Alcohol, Alcoholism and Chemical Dependency</td>
<td>3</td>
</tr>
<tr>
<td>SWK 472 — Approaches to Chemical Dependency</td>
<td>3</td>
</tr>
<tr>
<td>Treatment I</td>
<td></td>
</tr>
<tr>
<td>SWK 473 — Approaches to Chemical Dependency</td>
<td>3</td>
</tr>
<tr>
<td>Treatment II</td>
<td></td>
</tr>
<tr>
<td>SWK 474 — Practicum in Chemical Dependency</td>
<td>3</td>
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<tr>
<td>Chemical Dependency Electives</td>
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</tr>
<tr>
<td>TOTAL MINOR REQUIREMENTS</td>
<td>21</td>
</tr>
</tbody>
</table>

Approved Chemical Dependency Electives

Health: HLTH 418

Nursing: NURS 202, NURS 302, NURS 303, NURS 304

Psychology: PSY 154, PSY 156, PSY 157, PSY 390, PSY 450, PSY 465, PSY 469, PSY 471

Sociology: SOC 306, SOC 350, SOC 354, SOC 363, SOC 416, SOC 459


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.

Social Work Minor Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWK 210 — Orientation to Social Work</td>
<td>4</td>
</tr>
<tr>
<td>SWK 230 — Social Welfare History and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>SWK 310 — Field Experience in Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SWK 333 — Beginning Skills for Human Service Professionals, or SWK 360 — Crisis Intervention</td>
<td>3</td>
</tr>
<tr>
<td>SWK Electives</td>
<td>9</td>
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<tr>
<td>TOTAL MINOR REQUIREMENTS</td>
<td>22</td>
</tr>
</tbody>
</table>

Sociology and Criminology

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.

Program Standards

Students must earn a grade of "C" or higher in all required core courses in the sociology and criminology programs, including the sociology and criminology minors. To successfully complete the sociology and criminology programs, 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 - Area in Criminology and Criminal Justice

Program Competencies

1. Students will gain a fundamental knowledge of the criminal justice system, criminal justice courts, policing, the constitution and civil rights.

2. Students will develop professional communication skills and ethics in working with offenders and victims and practice these applied skills in the criminology practicum.

3. Students will become familiar with general sociological theory and theoretical explanations of crime and delinquency.

4. Students will develop the ability to read and understand criminological and sociological research methods and interpret the findings of such research.

5. Students will begin to understand the reciprocal relationships between the criminal justice system, criminal justice policies and crime.

6. Students will develop a working knowledge of the general concepts of sociological analysis, including exposure to selected substantive areas of sociology.

7. Students will develop skills in sociological research and reasoning, including research design, data analysis, report writing and computer literacy.

8. Students will develop reading skills, writing abilities and oral communication skills, so that they can apply sociological and criminological principles to criminal justice roles and explanations of criminal behavior and criminal justice system behavior.

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. The criminology and criminal justice area is designed to familiarize students with the 21st century’s best practices within the criminal justice system, like problem-solving courts, drug and mental health treatment and innovations in theoretical and empirical work in the study of the etiology, prevention and treatment of crime.

Program Requirements

General Education
CRIM 499C — Senior Criminology Capstone 3

General Education Total 36

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

Area Requirements
Students must earn a "C" or better in all course requirements. Students who do not earn a "C" must retake the course. Students must also maintain a 2.25 cumulative grade point average (GPA) across the area to continue in the program.

CCJ Area Requirements 39
SOC 101 — General Sociology 3
CRIM/SOC 210 — The Sociology of Deviance 3
CRIM 250 — Introduction to the Criminal Justice System 3
Choose two of the following courses (six hours):
CRIM 317 — Police Culture, CRIM 385 — Contemporary Legal Issues in the Criminal Justice System, or CRIM 388 — Sociology of Punishment 6
CRIM 380 — Race, Class, Gender and Crime 3
CRIM 401 — Criminology 3
CRIM 416 — Working with Offenders 3
CRIM 490 — Practicum in Criminology 5
CRIM 491 — Practicum Seminar (to be taken with CRIM 490) 1
SOC 405 — Sociological Theory 3
SOC 450 — Research Methodology 3
SOC 451 — Social Science Data Analysis 3

Criminology Electives 9
CRIM 300 — The Criminogenic Family
CRIM 306 — Juvenile Delinquency
CRIM 315 — White Collar Crime
CRIM 316 — Global Crime and Terrorism
CRIM 317 — Police Culture
CRIM 333 — Sociology of Gender Violence: Perspectives on Women and Intimate Partner Violence
CRIM 345 — Correctional Institutions
CRIM 363 — Cross-Cultural Perspectives on the Sex Industry
CRIM 385 — Contemporary Legal Issues in the Criminal Justice System
CRIM 388 — Sociology of Punishment
CRIM 395 — Sociology of Serial Murder
CRIM 399 — Selected Topics
CRIM 461 — Sociology of the Law
CRIM 465 — Environmental Sociology
CRIM 476 — Special Problems

Capstone 3
*CRIM 499C (hours counted in general education) 3

Components of Degree Requirements

General Education Requirement 36
Area Requirements 48
General Electives 36
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Arts - Sociology Major

Program Requirements

General Education
SOC 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.

Major Requirements
Sociology Major Requirements 21
SOC 101 — General Sociology 3
SOC 305 — Cultural Anthropology 3
Choose two of the following (six hours):
SOC 300 — Social Stratification
SOC 350 — The Human Experience of Sex and Gender
SOC 374 — American Minority Relations
SOC 405 — Sociological Theory 3
SOC 450 — Research Methodology 3
SOC 451 — Social Science Data Analysis 3

Electives 12
SOC electives — nine hours must be 300-level or above

Components of Degree Requirements

General Education 36
Major Requirements 33
Minor 21
General Electives 30
TOTAL PROGRAM REQUIREMENTS 120

Criminology Minor

Criminology Minor Requirements
CRIM/SOC 210 — The Sociology of Deviance 3
CRIM 250 — Introduction to the Criminal Justice System 3
CRIM/SOC 306 — Juvenile Delinquency or CRIM/SOC 401 — Criminology 3

Advanced electives for minor 15
TOTAL MINOR REQUIREMENTS 24

Sociology Minor

Sociology Minor Requirements
SOC 101 — General Sociology 3
SOC 405 — Sociological Theory 3
SOC 450 — Research Methodology 3
SOC — electives 200-level or above 3
SOC — electives 300-level or above 12
TOTAL MINOR REQUIREMENTS 24
College of Business and Public Affairs

College of Business and Public Affairs at a Glance

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

School of Business Administration

Greg Russell, Associate Dean
212 Combs Bldg.
Office: 606-783-2090
Fax: 606-783-5025
Email: g.russell@moreheadstate.edu

Accounting, Economics and Finance
- BBA - Track in Accounting
- BBA - Track in Economics
- BBA - Track in Finance
- Minor: Economics

General Business
- AAB - Area in Business Studies
- BBA - Track in General Business
- Minor: General Business

Information Systems
- BBA - Track in Business and Information Technology Educ
- BBA - Track in Computer Information Systems
- Minor: Computer Information Systems, Interdisciplinary Computing

Management and Marketing
- BBA - Track in Management
- BBA - Track in Marketing
- BBA - Track in Small Business Management and Entrepreneurship
- Minor: Marketing

Sport Management
- BA - Area in Sport Management

School of Public Affairs

Stephen Lange, Associate Dean
110G Combs Building
Office: 606-783-5419
Fax: 606-783-5092
Email: s.lange@moreheadstate.edu

Government and Regional Analysis
- BA - Major in Government
- BA - Major in Government - Track in Regional Analysis and Public Policy (RAPP)
- BA - Major in Public Policy
- Minor: Government, Regional Analysis and Public Policy (RAPP)

College of Business and Public Affairs Mission Statement

The mission of the College of Business and Public Affairs is to prepare students for successful careers and enriched lives in the public, private and nonprofit sectors; conduct and support basic, applied and pedagogical research; and utilize its resources to improve the quality of life in the eastern Kentucky region.

School of Business Administration

Greg Russell, Associate Dean
212 Combs Bldg.
Office: 606-783-2090
Fax: 606-783-5025
Email: g.russell@moreheadstate.edu

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; Timothy Devine, Core Solutions Neace Lukens; 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, Emerson Industrial Automation-Sealmaster; John D. Sewell, Whitaker Bank Corporation; Dennis N. Wallingford, retired; Toyota Motor Manufacturing; Gary Wiendtje, Morehead Clinic Pharmacy; Harold Wilson, Caswell Prewitt Reality Inc.; and Gary K. Young, Community Trust Bank.
Bachelor of Business Administration (BBA)

Program Goals
1. Communicate effectively.
2. Know and properly analyze ethical issues faced in business.
3. Have a regional and global perspective of business and appreciate the growing diversity of all stakeholders.
4. Understand the regulatory and legal aspects of business and their impact on business decisions.
5. Demonstrate the ability to solve business problems (supported by appropriate analytical and quantitative skills).
6. Recognize the strategic importance of information systems and demonstrate the ability to apply technologies for improving business processes.
7. 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:
Assurance of Learning Assessment for BBA Program

Bachelor of Business Administration (BBA)
All students choosing the BBA degree must complete a 27 credit hour track which should be selected from the following fields of study and approved by the academic advisor:
Accounting
Business and Information Technology Education
Computer Information Systems
Economics
Finance
General Business
Management
Marketing
Small Business Management and Entrepreneurship

Components of Degree Requirement
General Education (Core, Distribution, Capstone) 36
Business Qualifying, Prerequisite and Upper Core 51
Track Requirements 27
Free Electives 6

Business students may:
1. Apply the six semester hours of free elective credits to accounting, computer information systems, economics, finance, management, marketing, small business management and entrepreneurship and general business courses.
2. Apply the six hours of free electives toward any 100-499 level course at the University.
3. Complete a second track.

Total Program Requirements for BBA 120
The following core and distribution courses must be completed for all BBA tracks.

General Education Core
FYS 101 — First Year Seminar 3
ENG 100 — Writing I 3
ENG 200 — Writing II 3
COMS 108 — Fundamentals of Speech Communication 3
MATH 152 or MATH 174 or MATH 175 3

Core Total 15

General Education 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 — Social and Behavioral Sciences 3
ECON 201 — Macroeconomics (SBS II) 3

Distribution Total 18
BBA 499C — Strategic Management 3

General Education Total 36
Refer to the General Education section for a complete listing of general education requirements.

Business Qualifying Courses
BBA 295 — Business Communication 3
CIS 211 — Software Tools for Business 3
MKT 204 — Marketing 3
MNGT 201 — Principles of Management 3
Total 12

Business Prerequisite Course
ACCT 281 — Principles of Financial Accounting 3
ACCT 282 — Principles of Managerial Accounting 3
BBA 261 — Business Law and Regulations 3
ECON 201 — Principles of Macroeconomics * 3
ECON 202 — Principles of Microeconomics 3
Total 12

*ECON 201 is an SBS II exchange counted in general education.

Upper Core BBA Courses
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 Business Qualifying Courses and a cumulative Morehead State GPA of at least 2.25 for all MSU and transfer courses.
CIS 311 — Management Information Systems 3
FIN 360 — Business Finance 3
BBA 315 — Quantitative Analysis for Business 3
BBA 350 — Entrepreneurship & Innovation 3
BBA 363 — Ethical Decision Making in Business 3
BBA 370 — Operations & Services Management 3
BBA 380 — International Business (or international cooperative education, or international exchange course experience 3
BBA 475 — Leadership Development 3
BBA 499C — Strategic Management * 3
MATH 305 — Business Statistics 3
Total 27

*The capstone is counted in general education.
Accounting, Economics and Finance

Bachelor of Business Administration - Track in Accounting

Accounting Faculty
T. Elliott, S. Meisel, K. Pierce, S. Walters

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
Focus Group Surveys
SBA Co-Op Employer Performance Appraisals

Components of Degree Requirements

General Education 36
Business Qualifying and Prerequisite Courses 24
Upper Core BBA Requirements 27
Accounting Track Requirements 27
Free Electives 6

TOTAL PROGRAM REQUIREMENTS 120

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.

Bachelor of Business Administration - Track in Economics

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

Test of Understanding of College Economics (TUCE) Exam

In addition to the track courses listed below, the general education, BBA qualifying courses, prerequisite courses, upper division and free electives must be completed. The track in accounting is composed of 27 credit hours of specialized courses in accounting.

Accounting Track Requirements

<table>
<thead>
<tr>
<th>Track Requirements</th>
<th>27</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 381 — Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 382 — Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 383 — Intermediate Accounting III</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 387 — Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 390 — Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 483 — Auditing</td>
<td>3</td>
</tr>
<tr>
<td>Approved Accounting Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

Approved electives for the Accounting Track:

| ACCT 339 — Cooperative Education III, or ACCT 439 — Cooperative Education IV | 3 |
| ACCT 375 — Account Analysis & Fin Dec Making | 3 |
| ACCT 388 — Practice in Personal Tax Accounting | 3 |
| ACCT 391 — Accounting Information Systems | 3 |
| ACCT 428 — Governmental Accounting | 3 |
| ACCT 482 — Advanced Accounting | 3 |
| ACCT 485 — Forensic Accounting | 3 |
| ACCT 487 — Advanced Tax Accounting II | 3 |
| ACCT 490 — Cost Accounting II | 3 |

Components of Degree Requirements

General Education 36
Business Qualifying and Prerequisite Courses 24
Upper Core BBA Requirements 27
Accounting Track Requirements 27
Free Electives 6

TOTAL PROGRAM REQUIREMENTS 120

Economics Track Requirements

<table>
<thead>
<tr>
<th>Track Requirements</th>
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</thead>
<tbody>
<tr>
<td>ECON 341 — Public Finance</td>
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<tr>
<td>ECON 342 — Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>ECON 350 — Intermediate Microeconomics</td>
<td>3</td>
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<tr>
<td>ECON 351 — Intermediate Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 447 — International Economics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 373 — Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIN 472 — Portfolio Analysis</td>
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<tr>
<td>Approved Economics Electives</td>
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</tbody>
</table>
Approved electives for the Economics Track

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ECON 302</td>
<td>Labor Economics</td>
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<tr>
<td>ECON 305</td>
<td>Comparative Economic Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON 315</td>
<td>Resource Economics</td>
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</tr>
<tr>
<td>ECON 339</td>
<td>Cooperative Education III, or</td>
<td>3</td>
</tr>
<tr>
<td>ECON 439</td>
<td>Cooperative Education IV</td>
<td>3</td>
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<tr>
<td>ECON 401</td>
<td>Environmental Economics</td>
<td>3</td>
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<tr>
<td>ECON 403</td>
<td>Urban and Regional Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 410</td>
<td>History of Economic Thought</td>
<td>3</td>
</tr>
<tr>
<td>ECON 455</td>
<td>Economic Development and Growth</td>
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</tr>
<tr>
<td>ECON 456</td>
<td>Introduction to Econometrics</td>
<td>3</td>
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<tr>
<td>FIN 485</td>
<td>International Finance</td>
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<tr>
<td>MATH 175</td>
<td>Calculus I</td>
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<tr>
<td>MATH 275</td>
<td>Calculus II</td>
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<tr>
<td>MATH 276</td>
<td>Calculus III</td>
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<tr>
<td>MATH 301</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

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.

Components of Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>General Education</td>
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<tr>
<td>Business Qualifying and Prerequisite Courses</td>
<td>24</td>
</tr>
<tr>
<td>Upper Core BBA Requirements</td>
<td>27</td>
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<tr>
<td>Economics Track Requirements</td>
<td>27</td>
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<tr>
<td>Free Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL PROGRAM REQUIREMENTS</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

Bachelor of Business Administration - Track in Finance

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
SBA Co-Op Employer Performance Appraisal

In addition to the track courses listed below, the general education, BBA qualifying courses, prerequisite courses, upper division and free electives must be completed. The track in finance is composed of 27 credit hours of specialized courses in finance.

Finance Track Requirements

<table>
<thead>
<tr>
<th>Track Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 373 — Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIN 420 — Financial Markets and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>FIN 460 — Advanced Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 485 — International Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 490 — Seminar in Financial Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>Approved Finance Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

Approved Electives for the Finance Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT/FIN 375</td>
<td>Accounting Analysis and Financial Decision Making</td>
</tr>
<tr>
<td>ACCT 387</td>
<td>Income Tax</td>
</tr>
<tr>
<td>ACCT 487</td>
<td>Advanced Tax Accounting II</td>
</tr>
<tr>
<td>ACCT 490</td>
<td>Cost Accounting II</td>
</tr>
<tr>
<td>ECON 341</td>
<td>Public Finance</td>
</tr>
<tr>
<td>ECON 447</td>
<td>International Economics</td>
</tr>
<tr>
<td>FIN 325</td>
<td>Bank Management</td>
</tr>
<tr>
<td>FIN 339</td>
<td>Cooperative Education III, or</td>
</tr>
<tr>
<td>FIN 439</td>
<td>Cooperative Education IV</td>
</tr>
<tr>
<td>FIN/ECON 342</td>
<td>Money and Banking</td>
</tr>
<tr>
<td>FIN/MNGT 365</td>
<td>Financial Issues for Small Business</td>
</tr>
<tr>
<td>FIN 370</td>
<td>Working Capital Management</td>
</tr>
<tr>
<td>FIN 372</td>
<td>Retirement Planning and Employee Benefits</td>
</tr>
<tr>
<td>FIN 374</td>
<td>Estate Planning and Taxation</td>
</tr>
<tr>
<td>FIN 376</td>
<td>Risk Management and Insurance</td>
</tr>
<tr>
<td>FIN 472</td>
<td>Portfolio Analysis</td>
</tr>
<tr>
<td>FIN 484</td>
<td>Healthcare Financial Management</td>
</tr>
<tr>
<td>REAL 330</td>
<td>Real Estate Property Management</td>
</tr>
<tr>
<td>REAL 331</td>
<td>Real Estate Finance</td>
</tr>
</tbody>
</table>

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 track elective courses must be substituted for the course(s) used to fulfill the BBA/core requirement.

Components of Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>36</td>
</tr>
<tr>
<td>Business Qualifying and Prerequisite Courses</td>
<td>24</td>
</tr>
<tr>
<td>Upper Core BBA Requirements</td>
<td>27</td>
</tr>
<tr>
<td>Finance Track Requirements</td>
<td>27</td>
</tr>
<tr>
<td>Free Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL PROGRAM REQUIREMENTS</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

Economics Minor

Economics Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>ECON 350</td>
<td>Microeconomic Theory</td>
</tr>
<tr>
<td>ECON 351</td>
<td>Macroeconomic Theory</td>
</tr>
<tr>
<td>Approved Economics Minor Electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>TOTAL MINOR REQUIREMENTS</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Approved Economics Minor Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBA 315</td>
<td>Quantifying Analysis for Business</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Labor Economics</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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88 College of Business and Public Affairs
ECON 305 — Comparative Economic Systems 3
ECON 315 — Resource Economics 3
ECON 341 — Public Finance 3
ECON 342 — Money and Banking 3
ECON 401 — Environmental Economics 3
ECON 403 — Urban and Regional Economics 3
ECON 410 — History of Economic Thought 3
ECON 447 — International Economics 3
ECON 455 — Economic Development and Growth 3
ECON 456 — Introduction to Econometrics 3
BBA 350 — Entrepreneurship and Design
BBA 380 — International Business
CIS 320 — Web Technologies and Design
ECON 202 — Principles of Microeconomics
ECON 342 — Money and Banking
FIN 360 — Corporate Finance
MKT 325 — Marketing Ethics and Social Responsibility
MKT 354 — Consumer Behavior
MNGT 311 — Human Resource Management
SPMT 100 — Introduction to Sport Management

Components of Degree Requirements
General Education 15-16
Business Core Requirements 27
Elective Requirements 18
TOTAL PROGRAM REQUIREMENTS 60-61

Bachelor of Business Administration - Track in General Business

In addition to the track courses listed below, the general education, BBA qualifying courses, prerequisite courses, upper division and free electives must be completed. The track in general business is composed of 27 credit hours (one required course in accounting, computer information systems, economics, finance, management, marketing) and three approved business electives.

General Business Track Requirements
Track Requirements 27
Choose one of the following: Accounting
ACCT 375, ACCT 381, ACCT 387, ACCT 390, ACCT 391 or ACCT 428 3
Choose one of the following: Computer Information Systems
CIS 320, CIS 322, CIS 326, CIS 340, CIS 360, CIS 365 CIS 413 or BIS 425 3
Choose one of the following: Economics
ECON 341, ECON 342, ECON 350, ECON 351, ECON 401 or ECON 447 3
Choose one of the following: Finance
FIN 370, FIN 373, FIN 375, FIN 420 3
Choose one of the following: Management
MNGT 311, MNGT 465, REAL 330 3
Choose one of the following: Marketing
MKT 340, MKT 345, MKT 354, MKT 365 or MKT 452 9
*Approved General Business Electives
*Approved general business electives are any 300-level or 400-level business courses with the following prefixes: ACCT, BBA, CIS, ECON, FIN, MKTG, MKT or REAL. The nine hours of electives must consist of courses for which the prerequisites are met and courses that are not used to fulfill any other BBA-General Business degree requirement. A maximum of three hours may be taken as cooperative education.

Components of Degree Requirements
General Education 36
Business Qualifying and Prerequisite Courses 24
Upper Core BBA Requirements 27
General Business Track Requirements 27
Free Electives 6
**TOTAL PROGRAM REQUIREMENTS** 120

**General Business Minor (Non-Business Majors Only)**

**General Business Minor Requirements**
- ACCT 281 — Principles of Financial Accounting 3
- BBA 295 — Business Communication 3
- ECON 201 — Principles of Macroeconomics or 3
- ECON 202 — Principles of Microeconomics 3
- CIS 211 — Software Tools for Business 3
- MKT 204 — Marketing 3
- BBA 261 — Business Law and Regulations 3
- MNGT 201 — Principles of Management 3
**TOTAL MINOR REQUIREMENTS** 21

**Information Systems**

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

**Business and Information Technology Education (BITE) Faculty**
D. Everett

The mission of the Business and Information Technology Education (BITE) 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 in Kentucky. By completing this program, students are earning the Kentucky Business and Marketing Education teacher certification.

**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 business and marketing education classroom and courses.

**Students completing the program will be able to teach content that meets the following state standards:**

- Apply appropriately the accounting cycle for sole proprietorships, partnerships, and corporations.
- Use current technology to input, manipulate, present and disseminate information.
- Analyze and interpret the legal system as it affects consumers, producers and/or entrepreneurs.
- Plan, organize, control, and lead in the business environment.
- Analyze and apply how financial institutions operate and support economic growth.
- Apply economic concepts.
- Apply marketing functions as they relate to products and services.
- Communicate effectively both orally and in writing in a business setting.
- Describe the interrelationships of different functional areas of business and marketing.
- Develop the ability to participate in business and marketing transactions in domestic and international areas.
- Use technology appropriately, including evaluation of Web-based information.

**Assessment Procedures**

- Overall GPA of 2.75 for admission to and retention in the Teacher Education Program.
- Surveys of students (internal survey), alumni (external survey), cooperating teachers (clinical practice survey), and teacher educators (TPA evaluators, student teaching observations, dispositions and competency evaluation).
- Teaching demonstrations — both in class and in COB classes.
- Feedback and reflection are an important part of the teaching process.
- Knowledge of program of studies in business and marketing education.
- Application of core content assessment in Practical Living. Practice in writing and assessing higher order and open-response questions on lesson plans.
- Meet or surpass the Kentucky standard score for the PRAXIS II content (0-100) test.
- Demonstrated use of technology — in teaching, in preparation of a digital teaching portfolio, and in preparation of a recruitment kiosk for the BITE program.
- Supervised field experiences.

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).

**TEP Academic Admission Requirements (effective Fall 2012)**
1. Minimum GPA of 2.75 on all course work completed at MSU and other accredited and approved institutions is required.
2. Completion of EDF 207, EDF 211, ENG 100, ENG 200, COMS 108
3. 45 credit hours
4. Testing Requirements:
   - Reading Pre-professional Skills Test - minimum score of 176.
• Writing Pre-professional Skills Test - minimum score of 174.
• Math Pre-professional Skills Test - minimum score of 174.
5. Writing Requirement: Passing score (174) on the PPST Writing Test AND grades of "C" or better (or CLEP) in both ENG 100 and ENG 200.
6. Documentation of capacity to communicate, collaborate, think critically and be a creative teacher.

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

Program Requirements

General Education Requirements

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

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 — EDF 207 — Foundations of Education (exchange) 3
SBS II — ECON 201 — Principles of Macroeconomics (exchange) 3

Distribution Total 18

BIS 499C — Capstone 3

General Education Total 36

BITE Business Courses

BITE Core Requirements 39
BBA 295 — Business Communication 3
CIS 211 — Software Tools for Business 3
MKT 204 — Marketing 3
MKT 300+ elective 3
MNGT 201 — Principles of Management 3
ACCT 281 — Principles of Financial Accounting 3
ACCT 282 — Principles of Managerial Accounting 3
BBA 261 — Business Law and Regulations 3
*ECON 201 — Principles of Macroeconomics (SBS II exchange) 3
ECON 202 — Principles of Microeconomics 3
CIS 311 — Management Information Systems 3
BBA 350 — Entrepreneurship and Innovation 3
MATH 305 — Business Statistics 3

BITE Track Requirements 21

Track Requirements
BIS 216 — Advanced Document Processing 3
BIS/MNGT 425 — Training and Development for Industry 3
CIS 320 — Web Technologies and Design 3
CIS 322 — Systems Security and Information Assurance 3
CIS 326 — Relational Databases and SQL 3
CIS 360 — Business Enterprise Systems 3
CIS 340 — Telecommunications and Networking 3
CIS 442 — Network Administration 3
*BIS 499C — Teaching Methods in Business and Information Technology Education 3

Professional Education Requirements** 24
*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 Mgmt. for Secondary Teachers or EDUC 482 — Classroom Management and Assessment 3
EDSE 416 — Clinical Practice 12

Components of Degree Requirements

General Education (Core, Distribution, Capstone) 36
Business Courses 39
BITE Track 21
Professional Education Requirements 24

TOTAL PROGRAM REQUIREMENTS 120

*Counted in general education

**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.

Bachelor of Business Administration - Track in Computer Information Systems

Computer Information Systems Faculty

With the explosion 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

BBA Business Core Assessment of Learning

Embedded outcomes assessment measures established annually to assess the achievement of specific student outcome measures.

Successful Completion of Student Projects/Portfolios

In addition to the track courses listed below, the general education, BBA qualifying courses, prerequisite courses, upper division and free electives must be completed. The track in CIS is composed of 27 credit hours of specialized courses in computer information systems.

CIS Track Requirements

**Track Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 200</td>
<td>— Problem Solving in Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 320</td>
<td>— Web Technologies and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 326</td>
<td>— Relational Databases and SQL</td>
<td>3</td>
</tr>
<tr>
<td>CIS 340</td>
<td>— Telecommunication and Networking</td>
<td>3</td>
</tr>
<tr>
<td>CIS 413</td>
<td>— IS Design &amp; Implementation</td>
<td>3</td>
</tr>
<tr>
<td>CIS 490</td>
<td>— IT Project Management and Systems Project</td>
<td>3</td>
</tr>
<tr>
<td>Approved CIS Electives</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**Approved Electives for the CIS Track**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBA 301</td>
<td>— The Healthcare System</td>
<td>3</td>
</tr>
<tr>
<td>BIS/MNGT 425</td>
<td>— Training and Development in Industry</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202</td>
<td>— Introduction to Programming-Visual Basic</td>
<td>3</td>
</tr>
<tr>
<td>CIS 205</td>
<td>— Introduction to Programming-C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 214</td>
<td>— Introduction to Programming-Java</td>
<td>3</td>
</tr>
<tr>
<td>CIS 295</td>
<td>— End User Application Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 302</td>
<td>— Advanced Programming-Visual Basic</td>
<td>3</td>
</tr>
<tr>
<td>CIS 305</td>
<td>— Advanced Programming-C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 314</td>
<td>— Advanced Programming-Java</td>
<td>3</td>
</tr>
<tr>
<td>CIS 322</td>
<td>— Security and Information Assurance</td>
<td>3</td>
</tr>
<tr>
<td>CIS 330</td>
<td>— Collaborative Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CIS 360</td>
<td>— Business Enterprise Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 365</td>
<td>— Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 398</td>
<td>— Practicum in IS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 405</td>
<td>— Web Development Strategies and E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>CIS 426</td>
<td>— Database Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS 430</td>
<td>— Advanced Topics in IS</td>
<td>3</td>
</tr>
<tr>
<td>CIS 439</td>
<td>— Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td>CIS 442</td>
<td>— Network Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS 443</td>
<td>— Advanced Computer Networking Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS 476</td>
<td>— Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

Students may select additional CIS courses from this list to fulfill the six hours of free electives if students desire to gain additional coursework in information systems or internships.

Even though not required, all CIS students are encouraged to explore and investigate a possible 180 hour IT cooperative education placement or other virtual internship with an organization between their junior and senior year. Three hour credit for cooperative education is available. More information about possibilities may be obtained by emailing or making an appointment with the Cooperative Education Coordinator.

Components of Degree Requirements

<table>
<thead>
<tr>
<th>Component</th>
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<tbody>
<tr>
<td>General Education</td>
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<tr>
<td>Business Qualifying and Prerequisite Courses</td>
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</tr>
<tr>
<td>Upper Core BBA Requirements</td>
<td>27</td>
</tr>
<tr>
<td>CIS Track Requirements</td>
<td>27</td>
</tr>
<tr>
<td>Free Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL PROGRAM REQUIREMENTS** 120

Computer Information Systems Minor

**CIS Minor Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 200</td>
<td>— Logic and Design of Computer Programs</td>
<td>3</td>
</tr>
<tr>
<td>CIS 211</td>
<td>— Software Tools for Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 311</td>
<td>— Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 340</td>
<td>— Telecommunications and Networking</td>
<td>3</td>
</tr>
<tr>
<td>CIS 405</td>
<td>— Web Development Strategies and E-commerce, or CIS 320 — Web Technologies and Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Approved Electives for CIS Minor 6

**TOTAL MINOR REQUIREMENTS** 21

Approved electives for the CIS Minor

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 205</td>
<td>— Introduction to Programming - C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 214</td>
<td>— Introduction to Programming - Java</td>
<td>3</td>
</tr>
<tr>
<td>CIS 303</td>
<td>— Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CIS 305</td>
<td>— Advanced Programming - C++</td>
<td>3</td>
</tr>
</tbody>
</table>
Management Track Requirements

Core
MNGT 311 — Human Resource Management 3
MNGT 465 — Organizational Behavior 3

Approved Management Electives 9
Choose three of the following:
MNGT 310, MNGT 339 or MNGT 439 (maximum of three credit hours of co-op credit), MNGT 362, MNGT/FIN 365, MNGT 399, MNGT 409, MNGT 411, MNGT 417, MNGT 420, MNGT 450, MNGT 476

Guided Electives
Management track students must choose four courses (12 credit hours) from the following categories. The same course cannot be used to fulfill the approved management electives and guided electives components of the degree program.

Category 1: Management (General) 12
Choose four of the following:
MNGT 310, MNGT 339 or MNGT 439 (maximum of three credit hours of co-op credit), MNGT 362, MNGT/FIN 365, MNGT 399, MNGT 409, MNGT 411, MNGT 417, MNGT 420, MNGT 450, MNGT 476, MGT 345, MGT 350, MGT 354, MGT 399, MGT 409, MGT 411, MGT 417, MGT 420, MGT 450, MGT 476, MGT 469, ECON 447, FIN 342, FIN 376, FIN 484, FIN 485, REAL 105, REAL 309, REAL 330, REAL 335, BBA 301, HSM 361, CIS 365

Category 2: International Management 12
Complete the following courses:
MNGT 310, MNGT 339 or MNGT 439 (maximum of three credit hours of co-op credit), MNGT 362, MNGT/FIN 365, MNGT 399, MNGT 409, MNGT 411, MNGT 417, MNGT 420, MNGT 450, MNGT 476, MGT 345, MGT 350, MGT 354, MGT 451, MGT 452, MGT 469, ECON 447, FIN 342, FIN 376, FIN 484, FIN 485, REAL 105, REAL 309, REAL 330, REAL 335

Category 3: Health Care Management 12
Complete the following courses:
BBA 301 — The Healthcare System 3
FIN 484 — Healthcare Financial Management 3
Choose two courses (six hours) from the following: 6
HSM 361, CIS 365, MKT 365, FIN 376, MNGT 439

Components of Degree Requirements

General Education 36
Business Qualifying and Prerequisite Courses 24
Upper Core BBA Requirements 27
*Management Track (Categories 1,2 or 3) Requirements 27
Free Electives 6

TOTAL PROGRAM REQUIREMENTS 120

*See Category 2: International Management for additional track requirements.

Bachelor of Business Administration - Track in Marketing

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 or action for solving the problems or making decisions.

Assessment Procedures

Comprehensive Marketing Exit Exam
Comprehensive Marketing Case Analysis

In addition to the track courses listed below, the general education, BBA qualifying courses, prerequisite courses, upper division and free electives must be completed. The track in marketing is composed of 27 credit hours of specialized courses in marketing.

Marketing Track Requirements

Track Requirements 27
MKT 354 — Consumer Behavior 3
MKT 365 — Services Marketing 3
MKT 452 — Marketing Research and Analysis 3
MKT 495 — Marketing Strategies 3
Approved Marketing electives 15

Approved Electives for the Marketing Track

MKT 325 — Marketing Ethics and Social Responsibility 3
MKT 339 — Cooperative Education III or MGT 439 — Cooperative Education IV 3
MKT 340 — E-Marketing and Social Networking 3
MKT 345 — Marketing Strategies for Small Business 3
MKT 350 — Professional Selling 3
MKT 375 — Sustainable Marketing 3
MKT 380 — Corporate Marketing Strategies 3
MKT 451 — Retail Marketing 3
MKT 454 — Integrated Marketing Communication 3
MKT 455 — Advertising 3
MKT 469 — International Marketing 3
MKT 476 — Special Problems in Marketing 3

Components of Degree Requirements
General Education 36
Business Qualifying and Prerequisite Courses 24
Upper Core BBA Requirements 27
Marketing Track Requirements 27
Free Electives 6

TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Business Administration - Track in Small Business Management and Entrepreneurship

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 and Entrepreneurship exit examination

In addition to the track courses listed below, the general education, BBA qualifying courses, prerequisite courses, upper division and free electives must be completed. The track in SBME is composed of 27 credit hours of specialized courses in SBME.

Small Business Management and Entrepreneurship Track Requirements

Track Requirements 27
MNGT 310 — Small Business Organizations 3
MNGT 311 — Human Resource Management 3
MKT 345 — Marketing Strategies for Small Business 3
FIN/MNGT 365 — Financial Issues for Small Business 3
MNGT 420 — New Venture Creation 3
Approved Small Bus. Mgmt and Entrepren. electives 12

Approved Electives for the SBME
BBA 363 — Ethical Decision Making in Business 3
CIS 320 — Web Tech. and Design 3
FIN 370 — Working Capital Management 3
MNGT 339 — Cooperative Education III, or 3
MNGT 439 — Cooperative Education IV 3
MNGT 476 — Special Problems in Management 3
MKT 340 — E-Marketing and Social Networking 3
REAL 105 — Real Estate Principles 3
International Business Course (chosen from MNGT 409, MKT 469, ECON 447, FIN 485) 3

Components of Degree Requirements
General Education 36
Business Qualifying and Prerequisite Courses 24
Upper Core BBA Requirements 27
SBME Track Requirements 27
Free Electives 6
TOTAL PROGRAM REQUIREMENTS 120

Marketing Minor
Marketing Minor Requirements
MKT 204 — Marketing 3
MKT 350 — Professional Selling 3
MKT 354 — Consumer Behavior 3
MKT 454 — Integrated Marketing Communication 3
Approved Marketing Minor electives 12
TOTAL MINOR REQUIREMENTS 24

Approved Electives for the Marketing Minor
MKT 345 — Marketing Strategies for Small Business 3
MKT 365 — Services Marketing 3
MKT 451 — Retail Marketing 3
MKT 469 — International Marketing 3

Bachelor of Arts - Area in Sport Management

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

Program Competencies
The student will demonstrate competencies in the following areas:

1. Demonstrate the knowledge and skills necessary to effectively manage a sport or physical activity organization.
2. Demonstrate the knowledge and activities necessary to serve a diverse sport consumer population.
3. Demonstrate the ability to work effectively as an individual and as a member of a team.
4. Demonstrate an understanding of other disciplines and how they relate to sport management.
5. Demonstrate an understanding of sport management content and concepts.
6. Demonstrate the ability to evaluate sport or physical activity programs, products and services.
7. Demonstrate the skills and techniques (including technology) necessary for a successful career in sport management.
8. Demonstrate appropriate communication skills, both written and verbal, with various sport management constituencies.
9. Demonstrate the knowledge and skills necessary to effectively manage a sport or physical activity organization.

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

Assessment Procedures
Senior capstone course

Program Requirements

General Education
SPMT 499C — Senior Capstone 3

General Education Total 36

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

All students choosing the BA - Area in Sport Management degree must complete 21 credit hours of core electives and 59 credit hours of Sport Management courses.

Core Electives Requirements
Choose 21 hours from the following list based on their interests and career objectives.

ACCT 281 — Principles of Financial Accounting 3
BBA 261 — Business Law and Regulations 3
BBA 295 — Business Communications 3
BBA 363 — Ethical Decision Making in Business 3
CIS 311 — Management Information Systems 3
COMS 382 — Public Relations Principles 3
COMS 290 — Conflict and Communication 3
CVM 492 — Media Law and Ethics 3
ECON 202 — Principles of Microeconomics 3
MNGT 201 — Principles of Management 3
MKT 204 — Marketing 3
MNGT 311 — Human Resource Management 3
MKT 350 — Professional Selling 3
MKT 354 — Consumer Behavior 3
MKT 454 — Integrated Marketing Communication 3

Sport Management Requirements

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

College of Business and Public Affairs 95
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

**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**
- General Education (Core, Distribution, Capstone) 36
- Core Electives Requirements 21
- Sport Management Requirements 59
- Free Electives 4

**TOTAL PROGRAM REQUIREMENTS** 120

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### School of Public Affairs

**Stephen Lange, Associate Dean**
110G Combs Building
Office: 606-783-5420
Fax: 606-783-5092
Email: s.lange@moreheadstate.edu

The School of Public Affairs educates students in the fields of government, political science, regional analysis, public policy and public administration in preparation for law school, graduate school and rewarding careers in federal, state and local government, nonprofit organizations and the private sector. The School of Public Affairs also houses Morehead State University’s Program of Distinction: the Institute for Regional Analysis and Public Policy (IRAPP). IRAPP integrates university resources with regional resources to develop the potential of our service region. Academic programs, research initiatives and service activities connect MSU faculty and students in partnerships with citizens, political leaders and policymakers to promote the sustainable development of our region.

In addition to providing outstanding undergraduate and graduate education, the faculty and staff in the School of Public Affairs conduct research and perform outreach in areas such as national security, foreign policy, international relations, public health, environmental monitoring and restoration, hazards, GIS, political philosophy, public law, intergovernmental relations, federalism and economic development. The School of Public Affairs offers undergraduate and graduate scholarships and research assistantships, exciting internships and travel opportunities and the chance to work closely with distinguished faculty from a wide range of backgrounds.

### Government

**Government Faculty**

- K. Arnn (IRAPP), M. Bessette (IRAPP), W. Green, M. Hail (IRAPP), S. Lange (IRAPP), G. McBrayer (IRAPP), J. Pidluzny (IRAPP)

The government major and minor provide students with the opportunity to study political ideas, institutions and policies. The government faculty offers 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.

### Bachelor of Arts - Government Major

#### 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

#### Program Requirements (Government Major)

**General Education**

- GOVT 230 — Introduction to Comparative Politics (HUM II) 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.*

#### Major Requirements

**Required Introductory Courses**

- GOVT 141 — United States Government
- GOVT 180 — Introduction to Political Theory
- GOVT 230 — Introduction to Comparative Politics
- GOVT 289 — Methods of Political Inquiry 12

*Complete the following:*

- GOVT 141 — United States Government
- GOVT 180 — Introduction to Political Theory
- GOVT 230 — Introduction to Comparative Politics
- GOVT 289 — Methods of Political Inquiry
Required Advanced Subfield Courses 12
Choose one course in each of the four subfields:
2. Political Theory (GOVT 312, 314, 316, 317, 318, 440)
3. Comparative Politics (GOVT 301-304, 329-334, 337, 430)
4. International Politics (GOVT 360, 362, 364, 367, 368, 420)

Required Advanced Elective Courses 6
Complete the following:
*GOVT 499C — Senior Seminar (counted in general education)
GOVT electives (any 300 or 400-level GOVT or PS course)

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 Requirements
General Education 36
Introductory Courses 12
Advanced Subfield Courses 12
Advanced Electives 6
Minor 21
Free Electives 33
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Arts - Government Major with Regional Analysis and Public Policy Track

Faculty
K. Arnn (IRAPP), M. Bessette (IRAPP), C. Emrich (IRAPP), W. Green, M. Hail (IRAPP), T. Hare (IRAPP), S. Lange (IRAPP), G. McBrayer (IRAPP), S. Parkansky (IRAPP), J. Pidluzny (IRAPP), B. Reeder (IRAPP), E. Reeves (IRAPP, Emeritus), D. Rudy (IRAPP, Emeritus)

The Institute for Regional Analysis and Public Policy (IRAPP), MSU’s Program of Distinction, offers a track of 18 hours in regional analysis and public policy combined with the government major.

Program Competencies
Students are expected to possess:
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 inequalities in the policy making process.
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

Program Requirements (Government Major - Regional Analysis Track)

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

General Education Requirements 36
Refer to the General Education requirements for a complete listing for the University.

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

Required Electives 9
Choose three from the following:
GOVT 242 — State and Local Government
GOVT 329 — North American Politics: United States and Canada
GOVT 344 — Kentucky Government
GOVT 347 — American Public Policy
GOVT 351 — Public Administration
GOVT 364 — International Relations

Regional Analysis Courses 18
RAPP 202 — Basic Computer Tech in Reg Analysis 3
RAPP 203 — Society, Nature and Development 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

Components of Degree Requirements
General Education 36
Major Requirements 39
Minor 21
Free Electives (Any GOVT elective, including courses not selected in "Required Electives") 24
TOTAL PROGRAM REQUIREMENTS 120
Government Minor

Government Minor Requirements

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

Required Advanced Subfield Courses 9
Choose one course in three of the four subfields:
2. Political Theory (GOVT 312, 314, 316, 317, 318, 440)
3. Comparative Politics (GOVT 301-304, 329-334, 337, 430)
4. International Politics (GOVT 360, 362, 364, 367, 368, 420)

Required Advanced Courses 3
Any 300- or 400-level GOVT or PS elective

TOTAL MINOR REQUIREMENTS 24

Public Policy

Public Policy Faculty
K. Arnn (IRAPP), M. Bessette (IRAPP), C. Emrich (IRAPP), W. Green, M. Hail (IRAPP), T. Hare (IRAPP), S. Lange (IRAPP), G. McBrayer (IRAPP), S. Parkansky (IRAPP), J. Pidluzny (IRAPP), B. Reeder (IRAPP), E. Reeves (IRAPP, Emeritus), D. Rudy (IRAPP, Emeritus)

Bachelor of Arts - Public Policy Major
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, nonprofit 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.

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 nonprofits 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 and 350

Regional Analysis and Public Policy Program
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 a track in conjunction with the undergraduate government major that includes a unifying core of six courses in Regional Analysis and Public Policy (RAP). RAPP students learn to examine real world issues that affect peoples’ social, economic, political, and ecological lives. IRAPP also offers a minor that is open to students in all programs.

Annually through WEAVE Assessment and Planning Management System

Program Requirements (Public Policy Major)

General Education Requirements
General Education Requirements 33
PPOL 499C — Senior Seminar in Public Policy 3

General Education Total 36
Refer to the General Education section for a complete listing of general education requirements.

Major Requirements

Required Courses 24
Complete the following:
RAPP 101 — Introduction to Public Policy
GOVT 141 — U.S. Government
RAPP 203 — Society, Nature and Development
PPOL 205 — Conducting Public Policy Research
GOVT 242 — State and Local Government
RAPP 300 — Seminar in Regional Issues I
RAPP 350 — Practicing Regional Analysis I
PPOL 400 — Ethics in Public Policy

Required Electives 12
Choose four of the following courses:
GOVT 347 — American Public Policy
ECON 201 — Principles of Macroeconomics
MNGT 201 — Principles of Management
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

Components of Degree Requirements
General Education 36
Major Requirements 36
Minor 21
General Electives 27

TOTAL PROGRAM REQUIREMENTS 120
IRAPP's Division of Applied Research, Service, and Policy includes the Center for Virtual Appalachia, Center for Regional Biodiversity, Center for Community and Economic Development, Center for Environmental Education, Commonwealth Security Studies Laboratory, Institute for Federalism and Intergovernmental Relations, 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 School of Public Affairs, 110F Combs, Morehead, KY 40351, telephone 606-783-5419, s.lange@moreheadstate.edu.

### Regional Analysis and Public Policy Track

**Admission Requirements**

Acceptance to the Regional Analysis and Public Policy track 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.

**Track: Regional Analysis and Public Policy**

**Required coursework:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>RAPP 202</td>
<td>Basic Computer Tech. in Regional Analysis</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 203</td>
<td>Society, Nature and Development</td>
<td>3</td>
</tr>
<tr>
<td>RAPP 300</td>
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<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>
</tbody>
</table>

**Total Required Hours**

18

**Regional Analysis and Public Policy Minor**

**Admission Requirements**

Acceptance to this program requires 15 credit hours with GPA above 2.5. 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.
Regional Analysis and Public Policy Minor

Requirements

**Required Coursework**

<table>
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</tr>
</tbody>
</table>

**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.

**TOTAL MINOR REQUIREMENTS** 24
College of Education at a Glance

Kathryn Polmanteer, Interim Dean
100 Ginger Hall
Office: 606-783-2040
Fax: 606-783-5029
E-mail: k.polmanteer@moreheadstate.edu

Department of Early Childhood, Elementary and Special Education
- BA - Area in Interdisciplinary Early Childhood Education
- BA - Area in Child Development (nonteaching)
- BA - Area in Elementary Education (P-5)
- BA - Area in Elementary Education (P-5) and Learning and Behavior Disorders (P-12)
- BA - Area in Elementary Education (P-5) and Moderate and Severe Disabilities (P-12)
- BA - Community Support Services Major (nonteaching)

Minor: Community Support Services

Department of Middle Grades and Secondary Education
- BA - Area in Middle Grades Education (5-9)
- BA - Area in Middle Grades (5-9) and Learning and Behavior Disorders (P-12)
- BA - Area in Middle Grades (5-9) and Moderate and Severe Disabilities (P-12)

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

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

Teacher Education Program (TEP) and Professional Experiences

Regulations are subject to change by the Education Professional Standards Board (EPSB) and/or the University Teacher Education Council. Because of ongoing changes in the TEP, students need to work with their advisors to plan their programs.

Teacher education is a field-based program that provides extensive field experiences with students in area schools. Field experiences assist the University student in understanding the function of public school teaching and practical experiences in methodology. Each professional education course contains a required field experience component. Placements are made in cooperation with instructors and the coordinator of field experiences. Beginning September 1, 2013, all education students are required to complete 200 field experience hours prior to clinical practice/student teaching.

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 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 area 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 certification and may teach in both the special education and general education. There is also a nonteaching major and minor in community support services 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. Students must maintain a minimum 2.75 GPA.

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.

Students seeking certification in the following areas are required to complete a bachelor’s degree in that area and will be certified in grades P-12: art, Spanish, French, health, physical education and music.

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 2.5 page, double-spaced, typed description of relevant experiences the student has had in working with children or youth and examples of collaboration and creativity. 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.

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. Elementary P-5 applicants must have documentation of 24 field experience hours; MGSE (5-9) applicants must have documentation of 21 field experience hours; MGSE (5-9) Science component applicants must have documentation of 31 field experience hours.
3. The applicant must have a minimum GPA of 2.75 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.
4. Students applying for TEP at MSU must obtain the following scores on the PRAXIS pre-professional skills assessments (PPST):
   • Pre-Professional Skills: Mathematics (0730 or 5730) - 174, and
   • Pre-Professional Skills: Reading (0710 or 5710) - 176, and
   • Pre-Professional Skills: Writing (0720 or 5720 - 174.
5. Successful completion of prerequisite courses, with grades of “C” or better (ENG 100, ENG 200, COMS 108, EDF 207, and EDF 211 or HS 253) and prescribed clinical and field experiences.
6. Completion of and successful evaluation by program faculty of an admission interview demonstrating 1) effective communication, 2) creativity, 3) critical thinking, 4) ability to effectively collaborate with others, and 5) an understanding of the professional dispositions required of teachers.
7. 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.
8. 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 readmission 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 conduct the review.

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:**

- 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-S)
- EDF 311 — Learning Theories and Assessment in Education
- EDEL 333 — Fundamentals of Elementary Education
- 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 (S-9)
- EDSE 312 — Educational Methods and Technology
- EDSE 416 — Clinical Practice Secondary
- EDMSP 365 — Including Students with Diverse Needs in the Classroom
- EDMSP 373 - Curriculum for Students with MSD
- EDMSP 374 — Teaching Students with MSD
- EDMSP 375 - Practicum in Education of Students with MSD
- EDMSP 435 — Clinical Practice (LBD)
- EDMSP 437 — Clinical Practice (MSD)
- EDMSP 353 — Language Arts for Students with LBD
- EDMSP 355 — Teaching Students with LBD
- EDMSP 357 — Math and Content Area Teaching for Students with LBD
- LBD
- EDSP 359 — Practicum in LBD
- EDUC 476 — Reading in the Secondary School
- EDUC 482 — Classroom Management and Assessment
- ENG 382 — Teaching Writing in Secondary Schools
- ENG 400 — Studies in English for Teachers
- FRN 405 — Linguistics and Language Teaching
- 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
- HST 451 — Curriculum and Instruction for Social Studies
- HST 499D — Teaching of Social Studies
- 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 GPA of 2.75 on a 4.0 scale on all coursework completed (includes transfer credit).
4. Coursework completed at Morehead State University must reflect an overall 2.75 GPA.
5. A GPA of 2.75 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 GPA of 2.75 on a 4.0 scale in area of concentration, major(s) and academic components.
7. Completion of prerequisite courses.
8. A minimum GPA of 2.75 on professional education courses is required.
9. A minimum of 90 semester hours must have been completed.
10. Applicant must have a bonafide 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 a minimum of 200 hours of field experiences associated with professional education courses and program specific requirements.

15. As soon as a clinical practice candidate is notified by the ESU regarding the school placement, the candidate should contact the principal or central office personnel officer to secure information related to that district’s protocol for completing a criminal background check. Criminal background checks are required, as per EPSB state policy.

16. Candidates must take all required PRAXIS II test(s) and scores must be on file in the MSU Testing Center before a candidate will be permitted to begin the clinical semester. Starting in Spring 2016, candidates will be required to pass all PRAXIS tests in order to be admitted to clinical practice.

### Prerequisite Courses

#### Secondary Certification Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 207, EDF 211, EDF 311, EDSE 312, EDSP 230, EDSE 483 and required methods or field experience courses.</td>
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</tbody>
</table>

#### 5-12 Certification Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR</td>
<td>CTE 207, EDF 211, EDSP 230, CTE 388, CTE 392, CTE 470, CTE 478</td>
</tr>
<tr>
<td>IET</td>
<td>CTE 207, 388, 392, 470, 478, EDF 311, EDEM 330, EDSP 230, CTE 496</td>
</tr>
<tr>
<td>BITE</td>
<td>EDF 207, EDF 211, EDF 311, EDMG 306, EDSE 416, 483, EDSP 230, BIS 499C</td>
</tr>
</tbody>
</table>

#### P-12 Certification Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>EDF 207, EDF 211, EDF 311 or EDMG 306, EDSE 312, EDSE 483, HPE 301, 302, 304, HLTH 475, 418</td>
</tr>
<tr>
<td>BME</td>
<td>EDF 207, EDF 211, EDF 311, MUSC 271, MUSE 207, MUSE 215, MUSE 325, MUSH 267</td>
</tr>
<tr>
<td>Voice</td>
<td>MUSG 123, 124, 223, 224, MUSG 211 or 213; 212 or 214; 217 or 226, 239, MUSC 471, MUSE 375, 416</td>
</tr>
<tr>
<td>Brass/</td>
<td>MUSG 123, 124, 211, 212, 213, 214, 217, 223, 224, 226, 239, MUSC 472, MUSE 376</td>
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<tr>
<td>Woodwind</td>
<td></td>
</tr>
<tr>
<td>Percussion</td>
<td>MUSG 123, 124, 211, 212, 213, 214, 223, 224, 226, 239, MUSC 472, MUSE 376</td>
</tr>
<tr>
<td>Orchestral Strings</td>
<td>MUSG 123, 124, 211, 212, 213, 214, 223, 224, 226, 239, MUSC 472, MUSE 376</td>
</tr>
<tr>
<td>ART</td>
<td>ART 301, EDF 207, 311, EDSE 312, 483, EDSP 230 and required methods or field experience courses.</td>
</tr>
</tbody>
</table>

### 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

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 2.75
- PRAXIS I PPST Exams
- Interview
- Completion of required field experience hours
- Writing sample
- Teacher Performance Assessment
- PRAXIS Exams

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

Program Requirements

General Education

- BIOL 110 — Inquiry Biology for Teachers (NSC I) 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.

Area Requirements

IECE Area Requirements 68
- 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 1
- EDSP 371 — Transdisciplinary Assessment of Students with Moderate and Severe Disabilities Field Experiences 1

Supplemental Requirements 18
- 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 Teachers or ESS 112 — Inquiry Earth Systems Science for Teachers 3
- SWK 315 — Child Welfare Services or SWK 358 — Child Abuse and Neglect 3

Components of Degree Requirements

General Education 36
Area Requirements 68
Supplemental Requirements 18

TOTAL PROGRAM REQUIREMENTS 122

Bachelor of Arts - Area in 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 use 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/implement 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.

Program Requirements

General Education

BIOL 110 — Inquiry Biology for Teachers (NSC I) 3
EDEC 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. The department suggests students take PSY 154.

Area Requirements

Child Development Area Requirements 67
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
EDEC 416 — Infant/Toddler Program Planning 3
EDEC 418 — Preschool Program Planning 3
EDEC 425 — Early Childhood Practicum 9
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
MNGT 310 — Small Business Organization 3
SWK 335 — The Family 3

Supplemental Requirements 18
ART 121 — School Art I 3
HLTH 301 — Health, Safety, and Nutrition for Early Elementary 3
BBA 261 — Business Laws and Regulations or MNGT 201 — Principles of Management 3
MUSE 222 — Music for the Elementary Teacher 3
PHED 315 — Motor Development and Motor Learning 3
SWK 315 — Child Welfare Services or SWK 358 Child Abuse and Neglect 3

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

Components of Degree Requirements

General Education 36
Area Requirements 67
Supplemental Requirements 18
TOTAL PROGRAM REQUIREMENTS 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 at a preschool (3 to 5 years old) and/or infant/toddler (birth to 3) 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

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 2.75  
PRAXIS I PPST Exams  
Interview  
Completion of required field experience hours  
Writing sample  
Portfolio  
PRAXIS Exams

**Bachelor of Arts - Area in Early Elementary (P-5)**

**Program Requirements**

**General Education**

- BIOL 110 — Inquiry Biology for Teachers (NSC I)  
- EDF 211 — Human Growth and Development (SBS II)  
- EDEE 399C — Seminar in Effective Teaching  
- **General Education Total** 36

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

**Area Requirements**

**P-5 Area Requirements** 54

- EDEE 305 — Learn. Theor. and 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  
  *(taken with Elementary II or Elementary III)* 3  
- EDEE 327 — Literature and Materials for Young Readers  
  *(Elementary I courses to be taken concurrently)* 3  
- 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)** 3  
- SCI 490 — Science for the Elementary Teacher 3  
- EDEE 321 — Teaching Math in Early Elementary 3  
- EDUC 482 — Classroom Management and Assessment  
  *(Elementary III courses to be taken concurrently)* 3  
- 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

**Supplemental Requirements** 33

- 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 Teachers 3  
- ESS 112 — Inquiry Earth Systems Science for Teachers 3  
- GEO 300 — World Geography 3  
- GOVT 141 — United States Government 3  
- HST 260 — American History to 1865, or 3  
- HST 261 — American History since 1865 3  
- HLTH 301 — Health, Safety and Nutrition for Early Elementary 3  
- ART 121 — School Art I 3  
- MUSE 222 — Music for the Elementary Teacher 3

**Components of Degree Requirements**

- General Education 36  
- Area Requirements 54  
- Supplemental Requirements 33  
- **TOTAL PROGRAM REQUIREMENTS** 123

**Special Education**

**Special Education Faculty**

D. Grace, S. Hawkins-Lear, J. Knoll, A. Miller, P. Stokes, S. Stultz

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 5-9. Information found under Middle Grades program in Department of Middle Grades and Secondary Education.
4. Certification for MSD P-12 and 5-9. Information found under Middle Grades program in Department of Middle Grades and Secondary Education.

**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 disabled 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 nondisabled 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 2.75
PRAXIS I PPST Exams
Interview
Completion of required field experience hours
Writing sample
Teacher Performance Assessment
PRAXIS Exams

Bachelor of Arts - Area in Early Elementary (P-5) and LBD

Program Requirements

General Education
BIOL 110 — Inquiry Biology for Teachers (NSC I) 3
EDF 211 — Human Growth and Development (SBS II) 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.

Area Requirements

P-5 and LBD Area Requirements 73
EDF 207 — Foundations of Education 3
EDEE 305 — Learning Theories in Early Elementary 3
EDSP 230 — Education of Exceptional Children 3
EDEE 327 — Literature and Materials for Young Readers 3
Elementary I (courses to be taken concurrently)

- EDEL 302 — Integrating Tech. into the Classroom, 9
- EDEE 330 — Foundations of Reading, and
- EDSP 367 — Educational Assessment

Elementary II (courses to be taken concurrently)

- EDEE 321 — Teaching Math in Early Elementary and 6
- EDEE 322 — Teaching Social Studies in Early Elementary,
- EDEE 323 — Language Arts in Early Elementary, and
- EDEE 331 — Reading in the Early Elementary

EDEE 423 — Supervised Student Teaching Practicum 6
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 — Math and Content Teaching LBD 3
EDSP 359 — Practicum in Teaching for Students with LBD 1
EDSP 360 — Characteristics of Individuals with Learning Disabilities 3
EDSP 365 — Including Students with Diverse Needs in the Classroom (taken with either Elementary II or Elementary III) 3
EDSP 372 — Transitions to Adult Life 3
EDSP 435 — Supervised Teaching Practicum 6

Supplemental Requirements 15
HST 261 — American History since 1865 or
HST 271 — World History since 1500 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 Teachers or
ESS 112 — Inquiry Earth Systems Science for Teachers 3

Components of Degree Requirements

General Education 36
Area Requirements 73
Supplemental Requirements 15

TOTAL PROGRAM REQUIREMENTS 124

Bachelor of Arts - Area in Early Elementary (P-5) and MSD

Program Requirements

General Education
BIOL 110 — Inquiry Biology for Teachers (NSC I) 3
EDF 211 — Human Growth and Development (SBS II) 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.

Area Requirements

P-5 and MSD Area Requirements 72
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 and 6
- EDEE 330 — Foundations of Reading
**Elementary II (courses to be taken concurrently)**
- EDEE 321 — Teaching Math in Early Elementary and
- SCI 490 — Science for Elem. Teachers

**Elementary III - next three courses**
(courses to be taken concurrently)
- EDEE 322 — Teaching Social Studies in Early Elementary,
- EDEE 323 — Language Arts in Early Elementary,
- EDEE 331 — Reading in the Early Elementary

**EDSP 350 — Intellectual and Developmental Disabilities**
- EDSP 363 — Assistive Technology
- EDSP 365 — Including Students with Diverse Needs
- EDSP 370 — Transdisciplinary Assessment of Students
- EDSP 371 — Field Experience in Transdisciplinary
- EDSP 372 — Transitions to Adult Life

**MSD Block - next four courses**
(courses to be taken concurrently)
- EDSP 356 — Applied Behavior Analysis,
- EDSP 373 — Curriculum for Students with Moderate
- EDSP 374 — Teaching Students with Moderate
- EDSP 375 — Practicum in Education of Students with
- EDEE 423 — Supervised Student Teaching Practicum
- EDSP 437 — Student Teaching Practicum in Education of

**Supplemental Requirements**
- HST 261 — American History since 1865 or
- HST 271 — World History since 1500
- MATH 231 — Mathematics for the Elementary Teacher I
- MATH 232 — Mathematics for the Elementary Teacher II
- PSY 154 — Introduction to Psychology
- SCI 111 — Inquiry Physical Science for Elementary Teachers or ESS 112 — Inquiry Earth Systems Science for Teachers

**Components of Degree Requirements**
- General Education 36
- Area Requirements 72
- Supplemental Requirements 15

**TOTAL PROGRAM REQUIREMENTS** 123

**Bachelor of Arts - Community Support Services Major**

The department offers a nonteaching major and minor for students who would like to 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.

**Program Requirements**

**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.

**Major Requirements**

**Community Support Services Requirements** 35
- 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 3
- EDSP 372 — Transitions to Adult Life 3
- EDSP 450 — Supervised Teaching Practicum 4
- SWK 230 — Social Welfare History and Ethics 3
- SWK 333 — Beginning Skills for Human Service Professionals 3

**Supplemental Requirement** 3
- PSY 154 — Introduction to Psychology 3

**Components of Degree Requirements**
- General Education 36
- Major Requirements 38
- Minor 21
- Minor/Electives 25

**TOTAL PROGRAM REQUIREMENTS** 120

**Community Support Services Minor**

**Community Support Services Minor Requirements**
- 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 MINOR REQUIREMENTS** 23
Department of Middle Grades and Secondary Education

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

Middle Grades (5-9) Education

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 a 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 a 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 2.75.
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, COMS 108, EDF 207, EDF 211).
5. Students applying for TEP at MSU must obtain the following scores on the PRAXIS pre-professional skills assessments (PPST):
   - Pre-Professional Skills: Mathematics (0730 or 5730) - 174, and
   - Pre-Professional Skills: Reading (0710 or 5710) - 176, and
   - Pre-Professional Skills: Writing (0720 or 5720 - 174.

Assessment Procedures 5-9
- GPA of 2.75

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

Program Requirements

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

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

Area Requirements

5-9 Area Requirements 42
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
EDMG 342 — Teaching Social Studies in the MG 6
SCI 491 — Science for Middle School Teachers 3
SCI 391 — Teaching Science in Middle Grades and SCI 491 (Science Area Only) 4

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.

Supplemental Requirements

Academic Components - A GPA of 2.75 is required in all academic components

Science Area 45
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 General Chemistry I 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 4
PHYS 201A — Elementary Physics I Lab
SCI 111 — Inquiry Physical Science for Teachers 3
ESS 112 — Inquiry Earth Systems Science for Teachers 3
Choose one science elective from the following:
AGR 311, BIOL 351, ESS 350, ESS 376, 3
ESS 379, GEO 361 or GEO 390

Language Arts 21
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
COMS 350 3

Social Studies 24
ECON 101 or ECON 201 3
GEO 241 3
GEO 300 3
GOVT 141 3
HST 260 3
HST 261 3
HST 270 3
HST 271 3

Science 24
BIOL 150 or BIOL 155 or BIOL 234 (ACT of 18 or higher), 6
or BIOL 105 or BIOL 171 or BIOL 352 or BIOL 351
BIOL 110 3
ESS 108 4
CHEM 101 (must have ACT of 18 or higher or complete 4
MATH 091 with grade of "B" or higher)
PHYS 201/201A 4
SCI 111 or SCI 112 or ASTR 125 or ASTR 112 3

Mathematics 24
MATH 231 3
MATH 232 3
MATH 353 or MATH 305 3
MATH 300 3
MATH 332 3
MATH 330 3
MATH 141 and MATH 152 or MATH 174 and MATH 170 6

Components of Degree Requirements
General Education 36
Area Requirements 42
Supplemental Requirements 45-48
TOTAL PROGRAM REQUIREMENTS 123-126

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

Program Requirements

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

General Education Total 36

Area Requirements
5-9 and LBD Area Requirements 67
EDM 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 Middle Grades 3
EDMG 332 — Teaching Reading in the Middle Grades Content Area 3
EDMG 347 — Literature and Materials for the Middle Grades 3
EDMG 341 — Teaching Math in the Middle Grades or 3
EDMG 343 — Teaching Language Arts in Middle Grades or 3
EDMG 342 — Teaching Social Studies in the Middle Grades or 3
SCI 491 — Teaching Science in the Middle Grades 3
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 — Supervised Teaching Practicum 6

Supplemental Requirements 21-24
Academic Component: Students seeking 5-9 and LBD certification select only one component (listed under Supplemental Requirements for the stand alone middle grades program).

Components of Middle Grades 5-9 and LBD Degree
General Education 36
Area Requirements 67
Supplemental Requirements 21-24
TOTAL PROGRAM REQUIREMENTS 124-127
Bachelor of Arts - Area in Middle Grades (5-9) and MSD

Program Requirements

General Education

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

General Education Total  36

Area Requirements

5-9 and MSD Area Requirements  66
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 Middle Grades  3
EDMG 332 — Teaching Reading in the Middle Grades Content Area  3
EDMG 347 — Literature and Materials for the Middle Grades  3
EDMG 341 — Teaching Math in the Middle Grades or  3
EDMG 342 — Teaching Language Arts in Middle Grades or
EDMG 343 — Teaching Social Studies in the Middle Grades 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

Supplemental Requirements  21-24

Academic Component: Students seeking 5-9 and MSD certification select only one component (listed under Supplemental Requirements for the stand alone middle grades program.

Components of Middle Grades 5-9 and MSD Degree

General Education  36
Area Requirements  66
Supplemental Requirements  21-24

TOTAL PROGRAM REQUIREMENTS  123-126

Secondary Education

Secondary Education Faculty
L. Lennex, S. Riegle

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  3
EDSE 312 — Educational Methods and Technology  3
EDSE 483 — Classroom Organization and Management for Secondary Teachers  3
EDSE 230 — Education of Exceptional Children  3

Professional Semester
EDSE 416 — Clinical Practice  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. Students must maintain a minimum 2.75 GPA.
College of Science and Technology

College of Science and Technology at a Glance

Roger McNeil, Dean
246 Reed Hall
Office: 606-783-2158
Fax: 606-783-5039
Email: dsct@moreheadstate.edu

Department of Agricultural Sciences
AAS - Veterinary Technology
BS - Area in Agricultural Science (with tracks)
BS - Area in Veterinary Science
BS - Area in Veterinary Technology
Minors: Agriculture, Horsemanship
Pre-programs: Pre-Forestry, Pre-Veterinary Medicine

Department of Applied Engineering and Technology
AAS - Engineering Technology (with tracks)
BS - Area in Engineering Management
BS - Area in Engineering Technology (with tracks)
BS - Area in Industrial Education (with tracks)
BS - Area in Technology Management (online)
Minors: Engineering Technology

Department of Biology and Chemistry
BS - Area in Biological Sciences (with tracks)
BS - Area in Biomedical Sciences
BS - Area in Chemistry (with tracks)
BS - Major in Chemistry (with tracks)
Minors: Biology, Chemistry
Pre-programs: 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 and Space Science
BS - Area in Earth Systems Science (Geology)
BS - Area in Physics (Astrophysics track)
BS - Area in Space Science
Minors: Astronomy, Geology, Integrated Science

Department of Mathematics, Computer Science and Physics
BS - Area in Mathematics
BS - Area in Mathematics with Teacher Certification (Secondary)
BS - Major in Mathematics
BS - Major in Mathematics with Teacher Certification (Secondary)
BS - Area in Computer Science (with tracks)

BS - Area in Physics (with tracks)
Minors: Computer Gaming, Computer Science, Math, Physics, Statistics
Pre-Program: Pre-Engineering

Department of Psychology
BS - Psychology
BA - Psychology
Minor: Psychology

School of Health Sciences

Department of Health, Wellness and Human Performance
AAS - Respiratory Care
BA - Area in Physical Education with Teacher Certification (P-12)
BS - Area in Exercise Science
BA - Area in Health and Physical Education with Teacher Certification (P-12)
BA - Area in Health with Teacher Certification (P-12)
BA - Area in Health Promotion
BA - Health Promotion Major
Minor: Health

Department of Imaging Sciences
AAS - Radiologic Science
BS - Area in Computed Tomography/Magnetic Resonance
BS - Area in Diagnostic Medical Sonography
BS - Area in Leadership in Medical Imaging Program (online)

Department of Nursing
AAS - Associate Degree Nursing
BSN - Baccalaureate Nursing

Department of Agricultural Sciences
Cary Green, Chair
325 Reed Hall
606-783-2662

Agricultural Sciences Faculty
D. Chappell, C. Green (Chair), P. Harrelson, D. Johnson, B. Lewis, T. Mark, K. Peterson, T. Platt, P. Prater (Vet Tech Coordinator), B. Rogers, J. Stubbs

Bachelor of Science - Area in Agricultural Sciences

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 human-kind.
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 Tracks

Agribusiness Track
An understanding of the principles of accounting and how they are used in agribusiness.

Agricultural Education Track
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 Track
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 Track
The ability to demonstrate techniques used in the evaluation and feeding of farm livestock.

Golf Course Management Track
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 Track
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

Program Requirements

General Education
General Education Requirements

See General Education requirements for the University.
To complete an Area in Agricultural Sciences, the student must complete the agricultural sciences core requirements plus one of the following tracks: agricultural education, agribusiness, agronomy, animal science, general agriculture, golf course management or horticulture. General course electives may also be taken in agriculture and related fields by students wishing greater depth in an agricultural field.

Agricultural Sciences Area 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 and 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 or</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 or</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</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 or</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td></td>
</tr>
</tbody>
</table>

Total Area Core Requirements

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.

Components of Degree Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>37</td>
</tr>
<tr>
<td>Core Requirements</td>
<td>36</td>
</tr>
<tr>
<td>Prerequisites, Supplements, Special Electives</td>
<td>6</td>
</tr>
<tr>
<td>Minor</td>
<td>21</td>
</tr>
<tr>
<td>General Electives</td>
<td>20</td>
</tr>
</tbody>
</table>

TOTAL PROGRAM REQUIREMENTS

120

The specified course requirements must be taken in one of the following Agricultural Sciences tracks:

Agribusiness Track
Students who select this track must complete the required core courses in the area 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 (NSC II) 3
MATH 131 — Mathematical Reasoning and Problem Solving or MATH 135 — Mathematics for Technical Students 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 agribusiness track, the student must complete the agricultural sciences core. Where choices exist, the following core courses must be taken:

Area Requirements

Agricultural Sciences Core 36

AGR 101 — Orientation to Agriculture 1
AGR 102 — Agricultural Experience 2
AGR 133 — Introduction to Animal Science 3
AGR 143 — Anatomy and Physiology of Livestock or 3
AGR 180 — Introduction to Field Crops 3
AGR 204 — World Food 3
AGR 211 — Soils 3
AGR 215 — Horticultural Science or 3
AGR 233 — Animal Disease and Parasites 3
AGR 251 — Introduction to Agricultural Mechanics or 3
AGR 243 — Equine Health and Disease 3
AGR 261 — Information Acquisition and Analysis 3
AGR 300 — Pest Management or 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 3

Agribusiness Track Requirements 24

ACCT 281 — Principles of Financial Accounting 3
Advanced Electives (below) 21

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 201 — Principles of Management 3
MNGT 311 — Human Resource Management 3

Group C
AGR 305 — Marketing of Farm Products 3
MKT 204 — Marketing 3
MKT 350 — Professional Selling 3
MKT 354 — Consumer Behavior 3
MKT 453 — Marketing Planning and Strategies 3

Group D
BBA 261 — Business Law and Regulations 3
MKT 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 Requirements

General Education 37
Core Requirements 36
Prerequisites, Supplements, Special Electives 24
General Electives 23

TOTAL PROGRAM REQUIREMENTS 120

Agriculture Education Track

This track 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 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 (NSC II) 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.

Area Requirements

For the agricultural education track, the student must complete the agricultural sciences core. Where choices exist, the following core courses must be taken:

Agricultural Sciences Core 36

AGR 101 — Orientation to Agriculture 1
AGR 102 — Agricultural Experience 2
AGR 133 — Introduction to Animal Science 3
AGR 143 — Anatomy and Physiology of Livestock or 3
AGR 180 — Introduction to Field Crops 3
AGR 204 — World Food 3
AGR 211 — Soils 3
AGR 215 — Horticultural Science or 3
AGR 233 — Animal Disease and Parasites 3
AGR 251 — Introduction to Agricultural Mechanics or 3
AGR 243 — Equine Health and Disease 3
AGR 261 — Information Acquisition and Analysis 3
AGR 300 — Pest Management or 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 3

College of Science and Technology 115
Agriculture Courses
- Approved Agricultural Mechanics Elective 3
- Approved Animal Science Elective 3
- Approved Soil Science Elective 3
- Approved Agricultural Electives 2

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
- CTE 392 — Methods of Instructional Technology 3
- CTE 470 — Methods of Instruction 3
- CTE 478 — Student Teaching Practicum 12
- CTE 496 — Organization and Management of the Laboratory 3

Components of Degree Requirements
- General Education 37
- Core Requirements 36
- Prerequisites, Supplements, Special Electives (Teacher Education Program) 44
- General Electives 3

TOTAL PROGRAM REQUIREMENTS: 120

Teacher Certification
Students seeking teacher certification must apply for and be admitted to the TEP. Students must have an overall GPA standing of 2.75 in their area courses before they will be permitted to take agricultural education courses. Students must be approved by the agricultural staff and recommended for certification.

Agronomy Track
Students must complete the required core courses in the area 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
- CHEM 111 — Principles of Chemistry I (NSC II) 4
- MATH 131 — Math. Reasoning and Problem 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 agronomy track, the student must complete the agricultural sciences core. Where choices exist, the following core courses must be taken:

**Area Requirements**

**Agricultural Sciences Core** 36
- 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 311 — 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 or
- AGR 439 — Cooperative Education

**CHEM 201** — Survey of Organic Chemistry or
- CHEM 112 — Principles of Chemistry II 4

**Agronomy Track Requirements**

**Agronomy Track Requirements** 24
- AGR 308 — Weed Science 3
- AGR 311 — Soil Conservation 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
- AGR 205 — Farm Records
- AGR 303 — Land Economics
- AGR 312 — Soil Fertility and Fertilizers
- AGR 314 — Plant Propagation
- AGR 319 — Herbs
- AGR 320 — Principles of Vegetable Production
- AGR 325 — Turf Management
- AGR 350 — Farm Power and Machinery Management
- AGR 384 — Forage Crops
- BIOL 215 — General Botany
- BIOL 334 — Entomology
- BIOL 426 — Plant Physiology
- BIOL 449 — Plant Anatomy
- CHEM 326 — Organic Chemistry I

Components of Degree Requirements
- General Education 37
- Core Requirements 36
- Prerequisites, Supplements, Special Electives 24
- General Electives 23

TOTAL PROGRAM REQUIREMENTS: 120

Animal Science Track
The animal science track 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 track does not guarantee admission to a graduate program.

The following general education courses are required by the animal science track:

**General Education**
- CHEM 101 — Survey of Chemistry or CHEM 111 — Principles of Chemistry I (NSC II) 4
- MATH 131 — Mathematical Reasoning and Problem Solving or MATH 135 — Mathematics for Technical Students 3
- General Education Capstone 3

**General Education Total** 37

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

**Area Requirements**

**Agricultural Sciences Core** 36
- AGR 101 — Orientation to Agriculture 1
- AGR 102 — Agricultural Experience 2
- AGR 133 — Introduction to Animal Science 3
- AGR 143 — Anatomy and Physiology of Livestock 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 3
- AGR 316 — Feeds and Feeding 3
- AGR 402 — Advanced Agricultural Experience or AGR 339 — Cooperative Education 2
- AGR 439 — Cooperative Education 3
- CHEM 201 — Survey of Organic Chemistry or CHEM 112 — Principles of Chemistry II 4

*For the Animal Science track, the student must complete 12 hours of track requirements and 12 hours of track electives.*

**Animal Science Track Requirements** 24

*Complete the following 12 hours:*
- AGR 180 — Introduction to Field Crops 3
- AGR 222 — Livestock Evaluation 3
- AGR 330 — Livestock Improvement 3
- AGR 384 — Forage Crops 3

*Choose 12 hours from the following:*
- 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
- AGR 480 — Equine Breeding and Reproduction 3
- AGR 415 — Animal Nutrition 3

**Components of Degree Requirements**
- General Education 37
- Core Requirements 36
- Prerequisites, Supplements, Special Electives 24
- General Electives 23

**TOTAL PROGRAM REQUIREMENTS** 120

**Equine Science Track**

The equine science track 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 varies, it is essential to work closely with an equine science advisor to assure that the appropriate courses are taken. Completion of this degree track 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**
- CHEM 101 — Survey of Chemistry or CHEM 111 — Principles of Chemistry I (NSC II) 4
- MATH 131 — Mathematical Reasoning and Problem Solving or MATH 135 — Mathematics for Technical Students 3
- AGR 499C — Senior Seminar in Agriculture 3

**General Education Total** 37

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

**Area Requirements**

For the equine science track, the student must complete the agricultural sciences core. Where choices exist, the following core courses must be taken:

**Agricultural Sciences Core** 36
- AGR 101 — Orientation to Agriculture 1
- AGR 102 — Agricultural Experience 2
- AGR 133 — Introduction to Animal Science 3
- AGR 143 — Anatomy and Physiology of Livestock 3
- AGR 204 — World Food 3
- AGR 211 — Soils 3
- AGR 233 — Animal Disease and Parasites 3
- AGR 243 — Equine Health and Disease 3
- AGR 261 — Information Acquisition and Analysis 3
- AGR 301 — Farm Management 3
- AGR 316 — Feeds and Feeding 3
- AGR 402 — Advanced Agricultural Experience or AGR 339 — Cooperative Education 2
- AGR 439 — Cooperative Education 3
- CHEM 201 — Survey of Organic Chemistry or CHEM 112 — Principles of Chemistry II 4

**Equine Sciences Track Requirements** 24
Complete the following six hours:
AGR 222 — Livestock Evaluation 3
AGR 342 — Horse Production 3
Choose 18 hours from the following:
AGR 245 — Horseshoeing 3
AGR 306 — Principles of Epidemiology in Agriculture 3
AGR 329 — Advanced Stock Seat Horsemanship 3
AGR 330 — Livestock Improvement 3
AGR 332 — Advanced Saddle Seat Horsemanship 3
AGR 333 — Advanced Hunt Seat Horsemanship 3
AGR 335 — Equitation Teaching 3
AGR 338 — Livestock Judging 3
AGR 380 — Equine Management 3
AGR 480 — Equine Breeding and Reproduction 3
AGR 415 — Animal Nutrition 3
An additional 23 hours of electives must be completed; these may be chosen after consultation with the advisor.

Components of Degree Requirements
General Education 37
Core Requirements 36
Prerequisites, Supplements, Special Electives 24
General Electives 23
TOTAL PROGRAM REQUIREMENTS 120

General Agriculture Track

Students must complete the required core courses in the area in agricultural science and 24 semester hours of approved electives from the general agriculture track.

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
MATH 131 — Mathematical Reasoning and Problem 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 track, the student must complete the agricultural sciences core. Where choices exist, the following core courses must be taken:

Area Requirements

Agricultural Sciences Core 36
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 Approved Cooperative Education 2
CHEM 201 — Survey of Organic Chemistry or CHEM 112 — Principles of Chemistry II

General Agriculture Track Requirements

The minimum number of semester hours for each of the following six fields must be completed:

General Agriculture Track Requirements 24
Animal Science — Choose six hours from the following:
AGR 222 — Livestock Evaluation 3
AGR 243 — Equine Health and Disease 4
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 410 — Principles of Meat Science 3
AGR 415 — Animal Nutrition 3
Plant Science — Choose six hours from the following:
AGR 212 — Landscape Plants 3
AGR 213 — Landscape Design 3
AGR 224 — Greenhouse Operations 3
AGR 308 — Weed Science 3
AGR 314 — Plant Propagation 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
AGR 384 — Forage Crops 3
Soil Science — Choose three hours from the following:
AGR 311 — Soil Conservation, 3
AGR 312 — Soil Fertility and Fertilizers 3
Approved Agricultural Electives 3
Components of Degree Requirements

General Education 37
Core Requirements 36
Prerequisites, Supplements, Special Electives 24
General Electives 23
**TOTAL PROGRAM REQUIREMENTS** 120

Golf Course Management Track

Students who select this track must complete the required core courses in the area in agricultural sciences and 24 semester hours of track requirements, 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 (NSC II)
- MATH 131 — Mathematical Reasoning and Problem Solving or MATH 135 — Mathematics for Technical Students
- General Education Capstone 3

**General Education Total Hours** 37

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

**Area Requirements**

For the golf course management track, the student must complete the agricultural sciences core. Where choices exist, the following core courses must be taken:

**Agricultural Sciences Core** 36

- 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
- AGR 439 — Cooperative Education
- CHEM 201 — Survey of Organic Chemistry or 4
- CHEM 112 — Principles of Chemistry II

**Golf Course Management Track Requirements** 25

- AGR 212 — Landscape Plants 3
- AGR 308 — Weed Science 3
- AGR 318 — Landscape Maintenance 3
- AGR 325 — Turf Management 3
- MNGT 201 — Principles of Management 3
- MKT 204 — Marketing or
- MKT 354 — Consumer Behavior 3
- PHED 100 — Golf 1
- SPMT 307 — Sport Marketing 3
- SPMT 402 — Planning, Designing and Managing Sport and Physical Activity Facilities

**Components of Degree Requirements**

General Education 37
Core Requirements 36
Prerequisites, Supplements, Special Electives 25
General Electives 22
**TOTAL PROGRAM REQUIREMENTS** 120

Horticulture Track

Students must complete the required core courses in the area 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 4
- CHEM 111 — Principles of Chemistry I (NSC II)
- MATH 131 — Mathematical Reasoning and Prob. Solving or MATH 135 — Mathematics for Technical Students
- General Education Capstone 3

**General Education Requirements** 37

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

**Area Requirements**

For the horticulture track, the student must complete the agricultural sciences core. Where choices exist, the following core courses must be taken:

**Agricultural Sciences Core** 36

- 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
- AGR 439 — Cooperative Education
- CHEM 201 — Survey of Organic Chemistry or 4
- CHEM 112 — Principles of Chemistry I

**Horticulture Track Requirements** 24

- AGR 212 — Landscape Plants 3
- AGR 308 — Weed Science 3
- AGR 318 — Landscape Maintenance 3
- AGR 325 — Turf Management 3
- MNGT 201 — Principles of Management 3
- MKT 204 — Marketing or
- MKT 354 — Consumer Behavior 3
- PHED 100 — Golf 1

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
### Components of Degree Requirements

| General Education | 37 |
| Core Requirements  | 36 |
| Prerequisites, Supplements, Special Electives (Teacher Education Program) | 24 |
| General Electives | 23 |

**TOTAL PROGRAM REQUIREMENTS** 120

### Bachelor of Science - Agriculture Major

The student must complete the core course requirements listed under the area in agricultural sciences, 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.

### Bachelor of Science - Area in Veterinary Science

The Bachelor of Science - Area in Veterinary Science degree program is specifically designed to address the needs of pre-veterinary students. See the Pre-Veterinary Science information for more information.

Students (including transfers) entering the Bachelor of Science - Area in Veterinary Science Program must have been accepted into Morehead State University. Enrollment will be based on the cap size for individual courses. The BS-VS program will have no specific cap.

### Program Requirements

**General Education**

*The following specific general education requirements must be completed:*

- MATH 174 — Pre Calculus or MATH 175 — Calculus I 3-4
- BIOL 171 — Principles of Biology (NSC I) 4
- CHEM 111 — Principles of Chemistry I (NSC II) 4
- AGR 499C — Senior Seminar in Agriculture or VET 499C — Veterinary Technician Seminar 3

**General Education Total** 38-39

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

**Area Core Requirements** 50

<table>
<thead>
<tr>
<th>Area Core Requirements</th>
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</table>

| Area in Veterinary Science Program must have been accepted into... |

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AGR 315</td>
<td>Fruit Production</td>
<td>3</td>
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<tr>
<td>AGR 317</td>
<td>Floral Design</td>
<td>3</td>
</tr>
<tr>
<td>AGR 318</td>
<td>Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>AGR 319</td>
<td>Herbs</td>
<td>3</td>
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<tr>
<td>AGR 320</td>
<td>Principles of Vegetable Production</td>
<td>3</td>
</tr>
<tr>
<td>AGR 323</td>
<td>Interior Landscaping</td>
<td>3</td>
</tr>
<tr>
<td>AGR 324</td>
<td>Greenhouse Structures</td>
<td>3</td>
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<tr>
<td>AGR 325</td>
<td>Turf Management</td>
<td>3</td>
</tr>
<tr>
<td>AGR 326</td>
<td>Nursery Management</td>
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<tr>
<td>AGR 327</td>
<td>Advanced Landscape Design</td>
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<td>AGR 328</td>
<td>Floral Crop Production</td>
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<tr>
<td>BIOL 318</td>
<td>Anatomy and Physiology of Livestock</td>
<td>3</td>
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<tr>
<td>AGR 243</td>
<td>Animal Health and Disease</td>
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<tr>
<td>AGR 233</td>
<td>Animal Disease and Parasites</td>
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<tr>
<td>AGR 224</td>
<td>Equine Health and Disease</td>
<td>3</td>
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<tr>
<td>AGR 230</td>
<td>Feeds and Feeding</td>
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<tr>
<td>BIOL 210</td>
<td>General Zoology</td>
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<td>BIOL 211</td>
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<td>Principles of Microbiology</td>
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<td>MATH 172</td>
<td>Calculus II</td>
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<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
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<td>CHEM 326</td>
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<tr>
<td>CHEM 327</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 210</td>
<td>General Zoology</td>
<td>4</td>
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<tr>
<td>BIOL 301</td>
<td>Fundamentals of Biochemistry</td>
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<td>BIOL 304</td>
<td>Genetics</td>
<td>3</td>
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<td>BIOL 317</td>
<td>Principles of Microbiology</td>
<td>4</td>
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<tr>
<td>PHYS 201</td>
<td>Elementary Physics I and Lab</td>
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<tr>
<td>PHYS 201A</td>
<td>Elementary Physics I Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Elementary Physics II and Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202A</td>
<td>Elementary Physics II Lab</td>
<td>4</td>
</tr>
<tr>
<td>AGR 316</td>
<td>Feeds and Feeding</td>
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<tr>
<td>Choose three hours from the following:</td>
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</tr>
<tr>
<td>ART, FNA, MUSH, THEA or FLM</td>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Choose six hours from the following:</td>
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<td></td>
</tr>
<tr>
<td>HST</td>
<td>History Electives</td>
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<tr>
<td>Choose three hours from the following:</td>
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<td></td>
</tr>
<tr>
<td>ENG</td>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Science Electives** 33

Students may choose from a list of courses in agricultural, biological, chemical or physical sciences in consultation with their advisor. Courses may include, but are not limited to the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<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>
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<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>300-level or higher in AGR, BIOL, CHEM or PHYS</td>
<td>Electives</td>
<td>21</td>
</tr>
</tbody>
</table>

**Components of Degree Requirements**

| Program Science Electives | 33 |

| Program Requirements | 83 |

**TOTAL PROGRAM REQUIREMENTS** 121-122

### 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 Bachelor of Science - Area in Veterinary Science degree program is specifically designed to address the needs of pre-veterinary students. 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 healthcare 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 national board examinations

Associate of Applied Science in Veterinary Technology

(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 credentialed 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 2.8 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). Grades in required AGR, BIOL, CHEM and MATH courses must be "C" or better.

2. Transfer students must have a college GPA of 2.8 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, and CHEM 101 or higher). Grades in required BIOL, CHEM and MATH courses must be "C" or better.

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. Compliance in MSU Occupational Health for Animal Workers Program which includes risk training, risk assessment, and tetanus and pre-exposure rabies immunization requirements.

**Physical Capabilities:**

1. Vision capabilities:
   a. Normal or corrected refraction within the ranges of 20/20 to 20/190.
   
   b. Be able to distinguish color shade changes.

2. Auditory capabilities:
   Possess normal or corrected hearing ability within 0 to 45 decibel range.

3. Tactile capabilities:
   Possess in at least one hand the ability to perceive temperature change and pulsations and to differentiate between various textures and structures.

4. Language capabilities:
   Possess the ability to verbally communicate.

5. Motor capabilities:
   Possess four functional limbs (normal or artificial) which allow the following actions:
   
   a. Grasp securely with at least one hand;
   
   b. Stand for long periods of time;
   
   c. Walk unassisted.

6. Health Requirements:
   a. Mental Health
      Possess the ability to adapt to environment, function in everyday activities, and cope with stressors.

   b. Immunization requirements:
      Current immunization against the following:
      1. Rabies
      2. Tetanus

   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.

**Program Requirements**

**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:

- COMS 108 - Fundamentals of Speech Communication 3
- MATH 131 - Mathematical Reasoning and Problem Solving or higher
- ENG 100 - Writing I 3
- ENG 200 - Writing II 3
- FYS 101 - First Year Seminar 3

**Associate Requirements**

**Vet Tech AAS Core Requirements** 17

- AGR 133 - Introduction to Animal Science 3
- AGR 143 - Anatomy and Physiology of Livestock 3
- BIOL 160 - Introduction to Biological Principles or 3
BIOL 171 - Principles of Biology
BIOL 213 - Introduction to Veterinary Microbiology or 4
BIOL 217 - Elementary Medical Microbiology
CHEM 101 - Survey of Chemistry or 4
CHEM 111 - Principles of Chemistry I

Program Core Requirements 45
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

Components of Degree Requirements
General Education 15
Program Requirements 17
Prerequisites, Supplements, Special Electives 45
TOTAL PROGRAM REQUIREMENTS 77

Academic Progress Statement
Once admitted to the program, students must demonstrate adequate academic progress by earning a grade of "C" or better in all required VET courses.

Any required VET course and BIOL 213 or BIOL 217 in which a grade less than "C" is earned must be repeated with a grade of "C" or better prior to advancing in the program.

Dismissal from the program:
A student will be dismissed from the program for any of the following situations:

1. Earning a grade less than "C" or withdrawing while failing from the same required VET course (or BIOL 213 or BIOL 217) more than once;
2. Earning a grade less than "C" or withdrawing while failing from two different required VET courses (including 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 a 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 - Area in Veterinary Technology
Students (including transfers) entering the Bachelor of Science - Area 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 counsel from their advisor.

Note: Enrollment will be limited to 40 students.

Program Requirements

General Education
The following specific general education requirements must be completed:
CHEM 101 or CHEM 111 (NSC II) 4
VET 499C 3

General Education Total 37

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

Area Requirements

Core Requirements 55
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 Program Requirements**  28
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

*Counted in general education.

**Components of Degree Requirements**
General Education  37
Program Requirements  80
General Electives  3

**TOTAL PROGRAM REQUIREMENTS**  120

**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.

**Agriculture Minor Requirements**
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

**TOTAL MINOR REQUIREMENTS**  21

**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.

**Horsemanship Minor 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
- AGR 332 — Advanced Saddle Seat Horsemanship
- AGR 333 — Advanced Hunt Seat Horsemanship

**TOTAL MINOR REQUIREMENTS**  21

**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 General Chemistry I  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
ST 310 — Principles of Surveying  3
PHYS 201, 201A — Elementary Physics I and Laboratory  4
SOC 170 — Rural Sociology  3

**Fourth Semester**  15
COM 108 — Fundamentals of Speech Communication  3
ECON 201 — Principles of Macroeconomics  3
ENG — Literature elective  3
HST 261 — American History since 1865  3
PSY 154 — Introduction to Psychology  3
*Prerequisite required

**Total** 65

### Department of Applied Engineering and Technology

**Ahmad Zargari, Chair**
210 Lloyd Cabassity Building
606-783-2418

**Applied Engineering and Technology Faculty**
S. Adhikari, H. Chapman, W. Grisé, N. Joshi, S. Mason, J. Stubbs, Y. You, A. Zargari (Chair)

### Associate of Applied Science in Engineering Technology

**Program Competencies Associate of Applied Science**

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 engineering technologists.
3. Perform as a technical professional in business, industry, education and government.
4. Plan, facilitate, and integrate technology and problem solving techniques in the economic enterprise.
5. Acquire engineering knowledge in the area of specialization.

**Assessment Procedures**

- Exit Examinations
- Survey of graduating students
- Survey of program alumni
- Survey of employers of engineering technology graduates

**Admissions Requirement**

Minimum math ACT score of 20.

*Note: If a student is admitted conditionally, he or she will be required to successfully complete MATH 152 before being unconditionally admitted.*

**Program Requirements**

Students are required to obtain a grade of "C" in all technical and supplemental courses.

#### General Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 152</td>
<td>College Algebra (or higher)</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>COMS 108</td>
<td>Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>FYS 101</td>
<td>First Year Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Total** 15

#### Engineering Technology Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IET 110</td>
<td>Fundamentals of Computer Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Engineering Technology Core Total** 24

IET 120 — Technology Systems 3
IET 300 — Technology and Society 3
ITCD 103 — Computer Aided Design and Drafting I 3
ITCD 186 — Manufacturing and Fabrication 3
ITEC 141 — Direct Current Circuits (DC) 3
ITEC 202 — Structural Analysis 3
IET 320 — Industrial Project Management 3

Students will choose 21 hours from one of the four tracks of their choice:

- **Track 1** — Design and Manufacturing Engineering Technology
- **Track 2** — Construction Management and Civil Engineering Technology
- **Track 3** — Electronics and Computer Engineering Technology
- **Track 4** — Occupation-based Career and Technical Training

#### Track 1: Design and Manufacturing Engineering Technology

**Track 1 Requirements**

*Choose 21 hours from the list below:* 21

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITCD 203</td>
<td>Computer Aided Design and Drafting II</td>
<td>3</td>
</tr>
<tr>
<td>ITCD 215</td>
<td>Introduction to 3D Design and Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ITMT 170</td>
<td>Fundamentals of Robotics</td>
<td>3</td>
</tr>
<tr>
<td>ITMT 270</td>
<td>Robotic Systems Application</td>
<td>3</td>
</tr>
<tr>
<td>ITMT 286</td>
<td>Machine Tool Processes</td>
<td>3</td>
</tr>
<tr>
<td>ITMT 106</td>
<td>Thermoplastic Processing</td>
<td>3</td>
</tr>
<tr>
<td>ITCD 301</td>
<td>Tool and Equipment Design</td>
<td>3</td>
</tr>
<tr>
<td>IET 260</td>
<td>Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Track 2: Construction Management and Civil Engineering Technology

**Track 2 Requirements**

*Complete the following 21 hours from the list below:* 21

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITCM 101</td>
<td>Introduction to Construction Technology</td>
<td>3</td>
</tr>
<tr>
<td>ITCM 203</td>
<td>Construction Methods and Materials I</td>
<td>3</td>
</tr>
<tr>
<td>ITCM 204</td>
<td>Codes, Contracts, and Specifications</td>
<td>3</td>
</tr>
<tr>
<td>ITCM 205</td>
<td>Estimating and Construction Costs</td>
<td>3</td>
</tr>
<tr>
<td>ITCD 305</td>
<td>Residential Architecture Design</td>
<td>3</td>
</tr>
<tr>
<td>ITCM 304</td>
<td>Interpretation of Technical Drawings</td>
<td>3</td>
</tr>
<tr>
<td>ITCM 306</td>
<td>Construction Project Management</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Track 3: Electronics and Computer Engineering Technology

**Track 3 Requirements**

*Choose 21 hours from the list below:* 21

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEC 144</td>
<td>Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 215</td>
<td>Basic Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 240</td>
<td>Residential Wiring</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 241</td>
<td>AC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 242</td>
<td>Principles of Communications</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 244</td>
<td>Fiber Optic Theory and Applications</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 245</td>
<td>Digital Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>
ITEC 346 — Programmable Logic

Track 4: Occupation-based Career and Technical Training

Track 4 Requirements
Choose 21 hours from the list below.

CTE 185 — New Teacher Institute Career and Technical Education
CTE 207 — Foundations of Career and Technical Education
CTE 364 — Guidance in Career and Technical Education
CTE 372 — Technical Media Development
CTE 388 — Methods of Curriculum Development
CTE 393 — Methods of Career and Technical Education
CTE 396 — Evaluation in Career and Technical Education
EDF 211 — Human Growth and Development

Components of Degree Requirements
General Education 15
Core Requirements 24
Track Requirements 21
TOTAL PROGRAM REQUIREMENTS 60

Bachelor of Science - Area in Engineering Management

Program Competencies

Students completing this program should be able to:
2. Apply theories, concepts and principles of humanities, social and behavioral sciences and other disciplines to develop communications skills required for supervisors and technical managers.
3. Understand and apply concepts of mathematics, physics, statistics, economics, computer fundamentals and other disciplines to solve technological problems.
4. Apply concepts and skills developed in a variety of technical and related disciplines including total quality management, materials and production processes, supervisory and management principles and quality control to manage personnel and facilities.

Program Requirements

General Education
MATH 175 — Calculus I 4
IET 300 — Technology and Society (SBS II) 3
IET 499C — Senior Capstone Project 3
General Education Total 37

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

Area Requirements
Area Core Requirements 61
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 or IET 319 — Quality Control 3
IET 320 — Industrial Project Management 3
IET 327 — Applied Industrial Management 3
IET 330 — Industrial Design 3
IET 419 — Total Quality Control 3
IET 421 — Design of Experiments 3
IET 430 — Facilities Management 3
CHEM 111/111L — Principles of Chemistry I 4
CHEM 112/112L — Principles of Chemistry II 4
MATH 275 — Calculus II 4
MATH 363 — Differential Equations 3
MATH 365 — Introduction to Mathematical Statistics or MATH 353 — Statistics 3
PHYS 231/PHYS 231A — Engineering Physics I & Lab 5
PHYS 232/PHYS 232A — Engineering Physics II & Lab 5

Engineering Management Requirements 24
ITCD 103/103L — Computer-Aided Design and Drafting 3
ITMT 186/186L — Manufacturing and Fabrication 3
ITCM 202/202L — Structural Analysis 3
ITEC 141/141L — Direct Current Circuits 3
Choose 12 hours (six hours must be 300-level or above):
ITCD, ITMT, ITCM, ITEC, or IET

Components of Degree Requirements
General Education 37
Area Core Requirements 61
Engineering Management Requirements 24
TOTAL PROGRAM REQUIREMENTS 122

Bachelor of Science - Area 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 AET 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.

Program Requirements
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.

General Education
IET 300 — Technology and Society (SBS II) 3
IET 499C — Senior Project 3
MATH 152 — College Algebra, 3-4
MATH 174 — Pre-Calculus Mathematics, or
MATH 175 — Calculus I

General Education Total 36-37
Refer to the General Education section for a complete listing of general education requirements for the University.

Area Requirements
Area Core Requirements 36
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 Planning 3

Track Requirements 33
Choose 33 hours (15 hours from 300-level or above) in consultation with the academic advisor from one of the following tracks:
Track 1: Electronics and Computer Engineering Tech
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 (nine hours) from the following, in consultation with advisor:
IET 352, IETC 244, ITEC/SSE 341, ITEC 342, ITEC 346, ITEC 355, ITEC 400, IETC 444, ITEC 450, ITCD 303

Track 2: Design and 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 Tech 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 (nine hours) from the following, in consultation with advisor:
ITMT 106, ITMT 470, IETC 241, ITEC 346, ITCD 303, ITCD 403, ITCD 415, IET 260, IET 352

Track 3: Construction Mngt. and Civil Engineering Technology
ITCM 101 — Intro. to Construction Mngt. 3
ITCM 203 — Construction Methods and Materials 3
ITCM 204 — Codes, Contracts and Specifications 3
ITCM 205 — Estimating and Construction Costs 3
ITCM 304 — Interpretation of Technical Drawings 3
ITCM 307 — Hydrology 3
ITCM 310 — Principles of Surveying 3
ITCM 410 — Construction Surveying 3
Select three (nine hours) from the following, in consultation with advisor:
IET 352, ITCM 306, IETC 240, ITCD 303, ITCM 305, ITCD 404, ITC 405, ITCM 303

Supplemental Requirements 19-20
ITCD 103 — Computer Aided Design and Drafting I 3
ITCM 202 — Structural Analysis 3
ITEC 141 — DC Circuits 3
ITMT 186 — Manufacturing and Fabrication 3
MATH 174, MATH 175, MATH 275, MATH 353, or
MATH 365
PHYS 201/201A — Elementary Physics I 4

Components of Degree Requirements
General Education 36-37
Area and Track Requirements 69
Supplemental Requirements 19-20
TOTAL PROGRAM REQUIREMENTS 124-126
Note: Students are required to obtain a grade of "C" in all technical and supplemental courses.
Bachelor of Science - Area 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 5-12 technology education or secondary or postsecondary occupational based programs.

Assessment Procedures
- Exit Examinations
- Survey of graduating students
- Randomly administered alumni survey
- Capstone course

Note: Industrial education students are required to have documented evidence of 2,000 clock hours of work experience for the occupation-based career and technical education track, and 1,000 clock hours of work experience for engineering and technology track. 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 Track 1: Engineering and Technology
Students are required to obtain a grade of "C" in all technical and supplemental courses.

The student must complete the departmental and University general education requirements and a minimum of 39 semester hours of industrial education core requirements.

Program Requirements

General Education
IET 300 — Technology and Society (SBS II) 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.

Area Requirements

Area Core Requirements 36
IET 307 — Materials Science 3
IET 317 — Just In Time and Lean Systems 3
IET 319 — Quality Control 3
IET 320 — Industrial Project Management 3
IET 327 — Applied Industrial Management 3
IET 330 — Industrial Design 3
IET 419 — Total Quality Improvement 3
IET 422 — Industrial Safety Std. and Enforcement 3

ITCD 103 — Computer Aided Design and Drafting I 3
ITCM 101 — Introduction to Construction Technology 3
ITEC 141 — DC Circuits 3
ITMT 186 — Manufacturing and Fabrication 3

Technical Track 1 Requirements 35
CTE 207 — Foundations of Career and Technical Education 3
*CTE 388 — Methods of Curriculum Development 3
*CTE 392 — Methods of Instructional Technology 3
*CTE 470 — Methods of Instruction 3
*CTE 478 — Student Teaching Practicum 12
CTE 496 — Organization and Management of the Lab 2
EDEM 330 — Foundations of Reading 3
EDF 311 — Learning Theories and Assessment in Education 3
*EDSP 230 — Education of Exceptional Children 3

Supplemental Requirements 12
ECON 101 — Introduction to Economics or Principles of Macroeconomics 3
IET 110 — Fundamentals of Computer Technology 3
IET 120 — Technology Systems 3
MATH 353 — Statistics 3

*Course requires admission into the Teacher Education Program

Components of Degree Requirement

General Education 36
Area and Track Requirements 71
Supplemental Requirements 12
General Electives 1

TOTAL PROGRAM REQUIREMENTS 120

Technical Track 2: Occupation-based Career and Technical Education

Students are required to obtain a grade of "C" in all technical and supplemental courses.

The student must complete the departmental and University general education requirements and a minimum of 39 semester hours of industrial education core requirements.

Program Requirements

General Education
IET 300 — Technology and Society (SBS II) 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.

Area Requirements

Area Core Requirements 36
IET 307 — Materials Science 3
IET 317 — Just In Time and Lean Systems 3
IET 319 — Quality Control 3
IET 320 — Industrial Project Management 3
IET 327 — Applied Industrial Management 3
IET 330 — Industrial Design 3
IET 419 — Total Quality Improvement 3
IET 422 — Industrial Safety Std. and Enforcement 3
IET 422 — Industrial Safety Std. and Enforcement 3
ITCD 103 — Computer Aided Design and Drafting I 3
ITCM 101 — Introduction to Construction Technology 3
ITEC 141 — DC Circuits 3
ITMT 186 — Manufacturing and Fabrication 3

**Technical Track 2 Requirements** 41
CTE 207 — Foundations of Career and Technical Ed 3
CTE 185 — MOI Career and Technical Education 3
CTE 372 — Technical Media Development 3
CTE 364 or CTE 388 3
CTE 393 — Methods in Career and Technical Educ. 3
*CTE 394 — Practicum in Career and Technical Ed. 8
CTE 381 — Related Sci, Math, & Tech in Occupations 6
CTE 382 — Manipulative Skills in Occupations 6
IET 383 — Knowledge of Related Subjects 6

**Supplemental Requirements** 9
IET 110 — Fundamentals of Computer Technology 3
IET 120 — Technology Systems 3
MATH 353 — Statistics 3

CTE 394 is usually taken for four hours at the associate level and taken for an additional four hours at the bachelor’s level. If the student is only working on the bachelor’s degree, CTE 394 must be taken for eight hours to complete necessary requirements.

**Components of Degree Requirements**

<table>
<thead>
<tr>
<th>General Education</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area and Track Requirements</td>
<td>77</td>
</tr>
<tr>
<td>Supplemental Requirements</td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTAL PROGRAM REQUIREMENTS** 122

**Bachelor of Science - Area 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**

**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

**Program Requirements**

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 152 — College Algebra (or equivalent) or higher</td>
<td>3</td>
</tr>
<tr>
<td>IET 300 — Technology and Society (SBS II)</td>
<td>3</td>
</tr>
<tr>
<td>IET 499C — Senior Project</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Total** 36

*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.*

**Area Requirements**

**Area Core Requirements** 36

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IET 307 — Materials Science</td>
<td>3</td>
</tr>
<tr>
<td>IET 310 — Engineering Economics Analysis</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 Science</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 399 — Selected Topics</td>
<td>3</td>
</tr>
<tr>
<td>IET 419 — Total Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>IET 421 — Design of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>IET 422 — Industrial Safety Std. and Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>IET 430 — Facilities Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Supplemental Requirements** 12

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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 — Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201 — Elementary Physics I</td>
<td>3</td>
</tr>
</tbody>
</table>
Components of Degree Requirements

General Education 36
Area Core Requirements 36
Supplemental Requirements 12
General Electives 36
**TOTAL PROGRAM REQUIREMENTS** 120

Engineering Technology Minor

Engineering Technology Minor Requirements

**Core Requirements** 12
ITCD 103 — Computer Aided Design and Drafting I 3
ITMT 186 — Manufacturing and Fabrication 3
ITEC 141 — Direct Current Circuits (DC) 3
ITCM 202 — Structural Analysis 3

**Elective Requirements** 12
Students will choose 12 hours from the following, as approved by the minor advisor:
ITCD, ITMT, ITCM, ITEC or IET

**TOTAL MINOR REQUIREMENTS** 24

Department of Biology and Chemistry

Geoffrey Gearner, Interim Chair
103 Lappin Hall
606-783-2945
bioc@moreheadstate.edu

**Biology**

**Bachelor of Science - Area in Biological Sciences**

The biological sciences area is deep and diverse, enabling students to pursue careers such as a professional biologist, teacher, health professional or environmental scientist. 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

**Biological Sciences Area Track 1: Biology**

**Program Requirements**

**General Education**

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

- BIOL 171 — Principles of Biology (NSC I) 4
- CHEM 111 — Principles of Chemistry I (NSC II) 4
- *MATH 152 — College Algebra and 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.
Area Requirements

Biological Sciences Track 1 Requirements 36-39
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 3
Biol. 426 — Plant Physiology 3
Biol. 461 — Ecology 3
Math 353 — Statistics 3
Advanced Biology Electives 9-12

Supplemental Requirements 20
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

Components of Degree Requirements
General Education 38-39
Biological Sciences Track 1 Requirements 36-39
Program Supplements 20
General Electives 22-26

TOTAL PROGRAM REQUIREMENTS 120

Additional hours may be required depending on specific course choices.

Biological Sciences Area Track 2: Biology with Teacher Certification (Secondary)

Program Requirements

General Education

Refer to the General Education section for a complete listing of general education requirements for the University.
Biol. 171 — Principles of Biology (NSC I) 4
Chem 101 — Survey of Chemistry (NSC II) or 4
Chem 111 — Principles of Chemistry I (NSC II) 4
*MATH 152 — College Algebra and MATH 141 or 3-4
Math 174 — Pre-calculus or
Math 175 — Calculus I
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.

Area Requirements

Biological Sciences Track 2 Requirements 36
Biol. 210 — General Zoology 4
Biol. 215 — General Botany 4
Biol. 317 — Principles of Microbiology 4
Biol. 461 — Ecology 3
Biol. 234 — Principles of Human Anatomy and Physiology I 3
Biol. 235 — Principles of 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:

Supplemental Requirements 16
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 30
Edf 207 — Foundations of Education 3
Edf 211 — Human Growth and Development 3
Edf 311 — Learning Theories and Assessment in Educ 3
Edse 312 — Educational Methods and Technology 3
Edse 416 — Clinical Practice 12
Edse 483 — Classroom Organization and Mgmt. For Secondary Teachers 3
Edsp 230 — Education of Exceptional Children 3

Components of Degree Requirements
General Education 38-39
Biological Sciences Track 2 Requirements 36
Supplemental Requirements 16
Teacher Education Requirements 30

TOTAL PROGRAM REQUIREMENTS 120-121

Bachelor of Science - Area in Biomedical Sciences

The biomedical sciences area is designed for students that want to focus their studies in disciplines of biology related to health and medicine. These include, but are not limited to, cell biology, physiology, biochemistry, molecular biology, microbiology and genetics. The core of this degree provides a strong foundation for the student, and the electives facilitate breadth in the biomedical areas of interest. Because of the flexibility of the program, it is recommended for students considering careers in the health
professions, students wanting to pursue graduate studies in one of the biomedical sciences or students wanting to directly enter the workforce in one of the biomedical sciences.

Program Competencies

Students graduating with the Bachelor of Science degree in Biomedical Sciences 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 both qualitative and quantitative.

2. A general competency in the physical sciences, including basic inorganic and organic chemistry, as well as in introductory physics, mathematics and statistics.

3. An understanding of literacy of the disciplines of biology related to biomedicine, including cell biology, physiology, biochemistry, molecular biology microbiology and genetics.

4. An understanding of the interdisciplinary mature of biomedical sciences and science in general.

5. An awareness of the importance of the arts, humanities, social and behavioral sciences, health sciences, biological sciences and physical sciences to the human community.

Assessment Procedures

- Labs/experiments
- Major Field Aptitude Test
- Capstone
- Employer feedback
- Graduate feedback
- Performance of graduates on entrance examinations to post-baccalaureate programs

Program Requirements

General Education

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 171</td>
<td>Principles of Biology (NSC I)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>Principles of Chemistry I (NSC II)</td>
<td>4</td>
</tr>
<tr>
<td>*MATH 152</td>
<td>College Algebra and MATH 141 or MATH 174</td>
<td>3-6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 499E</td>
<td>Current Issues in Biomedical Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Total** 38-41

*Students taking MATH 152 as a general education core class must also complete MATH 141 or MATH 174 as an additional requirement.*

Area Requirements

**Biomedical Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 301</td>
<td>Fundamentals of Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 304</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 317</td>
<td>Principles of Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 380</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 326</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Elementary Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201A</td>
<td>Elementary Physics I Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Elementary Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 202A</td>
<td>Elementary Physics II Lab</td>
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</table>

**Biomedical Electives** 26

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 199, BIOL 244/244A, BIOL 245/245A, BIOL 336, BIOL 337, BIOL 338, BIOL 385, BIOL 399, BIOL 424, BIOL 425, BIOL 427, BIOL 428, BIOL 429, BIOL 443, BIOL 444, BIOL 446, BIOL 447, BIOL 473, BIOL 476, BIOL 490, BIOL 493, BIOL 499D, CHEM 327</td>
<td></td>
</tr>
</tbody>
</table>

**Components of Degree Requirements**

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>38-41</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>33</td>
</tr>
<tr>
<td>Program Supplements</td>
<td>26</td>
</tr>
<tr>
<td>General Electives</td>
<td>20-23</td>
</tr>
</tbody>
</table>

**TOTAL PROGRAM REQUIREMENTS** 120

Biology Minor

**Biology Minor Requirements**

**Core Requirements** 15

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 171</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 210</td>
<td>General Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 215</td>
<td>General Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 304</td>
<td>Genetics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective Requirements** 9

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 (track 1).

**Supplemental Requirements** 8

*The student must take one of the following sequences:*

**Sequence I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>Survey of General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>Survey of Organic Chemistry, or</td>
<td>4</td>
</tr>
</tbody>
</table>

**Sequence II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>Principles of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL MINOR REQUIREMENTS** 32

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 in biology (track 1). 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 healthcare 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 GPA) during the hospital-based clinical year to receive credit: immunohematology, 58 hours of lecture and 106 hours of laboratory; medical microbiology, 80 hours of lecture and 180 hours of laboratory; medical mycology, 30 hours of lecture and 180 hours of laboratory; medical microbiology, 80 hours of lecture and 33 hours of laboratory; medical mycology, 30 hours of lecture and 33 hours of laboratory; serology and immunology, 40 hours of lecture and 32 hours of laboratory; routine analysis, 40 hours of lecture and 150 hours of laboratory; clinical chemistry, 114 hours of lecture and 180 hours of laboratory; medical parasitology, 25 hours of lecture and 45 hours of laboratory; hematology, 99 hours of lecture and 180 hours of laboratory; medical technology seminar, 16 hours of lecture; and special topics, 91 hours of lecture and 33 hours of 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. Dennis, D. Eisenhour

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-physical therapy students generally follow the curriculum designed for the biology major. However, certain complementary and specific general education courses are recommended.

Academic handbook and suggested curriculum are available from the pre-physical therapy 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 healthcare.

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) — 6
- 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 (U/G) — 2
- 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.

Bachelor of Science - Area in Chemistry

Chemistry Area Track 1: Biomedical Chemistry

Program Requirements

General Education Requirements

- MATH 175 — Calculus I — 4
- BIOL 171 — Principles of Biology w/lab (NSC I) — 4
- CHEM 111 — Principles of Chemistry I w/lab (NSC II) — 4
- CHEM 499C — Chemistry Senior Project I and — 2
- CHEM 499D — Chemistry Senior Project II — 1

General Education Total — 39

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

Area Requirements

Area Core Requirements — 33-35

- PHYS 201/201A — Elementary Physics and Lab, or — 4-5
- PHYS 231/231A — Engineering Physics and Lab — 4-5
- PHYS 202/202A — Elementary Physics II and Lab, or — 4-5
- PHYS 232/232A — Engineering Physics II and Lab — 4
- CHEM 112 — Principles of Chemistry II, or — 4
- CHEM 131 — Environmental Chemistry I
CHEM 301 — Fundamentals of Biochemistry 4
CHEM 326 — Organic Chemistry I w/lab 4
CHEM 327 — Organic Chemistry II w/lab 4
CHEM 351 — Bioinorganic Chemistry w/lab 3
CHEM 360 — Analytical Chemistry w/lab 3
CHEM 441 — Physical Chemistry I 3

**Biomedical Chemistry Requirements** 22-25

- BIOL 304 — Genetics w/lab 3
- BIOL 380 — Cell Biology w/lab 3
- BIOL 244/244A — Human Anatomy and Physiology I and Lab 4

*Choose four biomedical electives:* 12-15

- BIOL 245/245A — Human Anatomy and Physiology II and Lab (must be taken together to count as one elective),
- BIOL 317 — Principles of Microbiology w/lab,
- BIOL 336 — Pathophysiology,
- BIOL 446 — Biotechnology w/lab,
- BIOL 490 — Advanced Biochemistry,
- CHEM 429 — Pharmaceutical Chemistry, or
- BIOL 336 — Pathophysiology,
- BIOL 317 — Principles of Microbiology w/lab,
- BIOL 336 — Pathophysiology,
- BIOL 446 — Biotechnology w/lab,
- BIOL 490 — Advanced Biochemistry,
- CHEM 429 — Pharmaceutical Chemistry, or
- CHEM/BIOI 399 — Selected Topics

**Components of Degree Requirements**

- General Education 39
- Area Core Requirements 33-35
- Biomedical Chemistry Requirements 22-25
- General Electives 21-26

**TOTAL PROGRAM REQUIREMENTS** 120

**Chemistry Area Track 2: Professional Chemist**

**Program Requirements**

**General Education Requirements**

- MATH 175 — Calculus I 4
- BIOL 171 — Principles of Biology w/lab (NSC I) 4
- CHEM 111 — Principles of Chemistry I w/lab (NSC II) 4
- CHEM 499C — Chemistry Senior Project I and
- CHEM 499D — Chemistry Senior Project II 1

**General Education Total** 39

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

**Area Requirements**

**Area Core Requirements** 33-35

- PHYS 201/201A — Elementary Physics and Lab, or 4-5
- PHYS 231/231A — Engineering Physics and Lab
- PHYS 202/202A — Elementary Physics II and Lab, or 4-5
- PHYS 232/232A — Engineering Physics II and Lab
- CHEM 112 — Principles of Chemistry II, or 4
- CHEM 131 — Environmental Chemistry I
- CHEM 301 — Fundamentals of Biochemistry 4
- CHEM 326 — Organic Chemistry I w/lab 4
- CHEM 327 — Organic Chemistry II w/lab 4
- CHEM 351 — Bioinorganic Chemistry w/lab 3
- CHEM 360 — Analytical Chemistry w/lab 3
- CHEM 441 — Physical Chemistry I 3

**Professional Chemist Requirements** 23-24

- CHEM 340 — Chemical Information 2
- CHEM 442 — Physical Chemistry II 5
- CHEM 451 — Advanced Inorganic Chemistry 3
- CHEM 460 — Analytical Chemistry II 5
- CHEM 476 — Special Problems 1
- MATH 275 — Calculus II 4

*Choose one course elective:* 3-4

- MATH 276 — Calculus III,
- MATH 363 — Differential Equations, or
- MATH 365 — Introduction to Mathematical Statistics

**Components of Degree Requirements**

- General Education 39
- Area Core Requirements 33-35
- Professional Chemist Requirements 23-24
- General Electives 22-26

**TOTAL PROGRAM REQUIREMENTS** 120

**Bachelor of Science - Chemistry Major**

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 tracks. Students who wish to work in the chemical industry will follow the general track. 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 track prepares students to work directly in positions in the environmental industry or for graduate study in this field or law.

The chemistry teaching track is solely intended to qualify the student for state certification for secondary school chemistry teaching.

**Chemistry Major Track 1: General Chemistry**

**Program Requirements**

**General Education Requirements**

- BIOL 171 — Principles of Biology (NSC I) 4
- CHEM 111 — Principles of Chemistry I (NSC II) 4
- MATH 174 — Pre-Calculus Mathematics 3
- CHEM 499C — Chemistry Senior Project I, and 2
- CHEM 499D — Chemistry Senior Project II 1

**General Education Total** 38

**Track I Requirements**

**General Chemistry Track Requirements** 25

- CHEM 112 — Principles of Chemistry II or 4
- CHEM 131 — Environmental Chemistry I 4
- CHEM 326 — Organic Chemistry I 4
- CHEM 351 — Bioinorganic Chemistry 3

**Components of Degree Requirements**

- General Education 39
- Area Core Requirements 33-35
- Professional Chemist Requirements 23-24
- General Electives 22-26

**TOTAL PROGRAM REQUIREMENTS** 120
## Components of Degree Requirements

### General Education Requirements
- General Education: 38
- General Chemistry Requirements: 12
- Supplemental Requirements: 21
- General Electives: 24
- **TOTAL PROGRAM REQUIREMENTS**: 120

### Chemistry Major Track 2: Environmental Chemistry

#### Program Requirements

**General Education Requirements**
- BIOL 171 — Principles of Biology (NSC I): 4
- CHEM 111 — Principles of Chemistry I (NSC II): 4
- MATH 174 — Pre-Calculus Mathematics: 4
- CHEM 499C — Chemistry Senior Project I, and: 2
- CHEM 499D — Chemistry Senior Project II: 1
- **GENERAL EDUCATION TOTAL**: 38

#### Track 2 Requirements

**Environmental Chemistry Requirements**
- CHEM 112 — Principles of Chemistry II or: 4
- CHEM 131 — Environmental Chemistry I: 4
- CHEM 332 — Environmental Chemistry II: 3
- 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 and Physical Science Teaching Methods: 3
- SCI 403 — Integrated Biology, Mathematics and Science Field Experiences in Teaching: 3
- **SUPPLEMENTAL REQUIREMENTS**: 12
- MATH 175 — Calculus I: 4
- PHYS 201 — Elementary Physics I and PHYS 201A: 4
- PHYS 202 — Elementary Physics II and PHYS 202A: 4
- **TEACHER EDUCATION REQUIREMENTS**: 30
- EDF 207 — Foundations of Education: 3
- EDF 211 — Human Growth and Development: 3
- EDF 311 — Learning Theories and Assessment in Educ: 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

**Components of Degree Requirements**
- General Education: 38
- Track Requirements: 26-27
- Supplemental Requirements: 12
- Minor: 21
- **TOTAL PROGRAM REQUIREMENTS**: 120

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 Major Track 3: Chemistry with Teacher Certification (Secondary)

#### Program Requirements

**General Education Requirements**
- BIOL 171 — Principles of Biology (NSC I): 4
- CHEM 111 — Principles of Chemistry I (NSC II): 4
- MATH 174 — Pre-Calculus Mathematics: 3
- CHEM 499C — Chemistry Senior Project I, and: 2
- CHEM 499D — Chemistry Senior Project II: 1
- **GENERAL EDUCATION TOTAL**: 38

**Track 3 Requirements**

**Chemistry with Teacher Certification (Secondary) Requirements**
- CHEM 112 — Principles of Chemistry II or: 4
- 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 and Physical Science Teaching Methods: 3
- SCI 403 — Integrated Biology, Mathematics and Science Field Experiences in Teaching: 3
- **SUPPLEMENTAL REQUIREMENTS**: 12
- MATH 175 — Calculus I: 4
- PHYS 201 — Elementary Physics I and PHYS 201A: 4
- PHYS 202 — Elementary Physics II and PHYS 202A: 4
- **TEACHER EDUCATION REQUIREMENTS**: 30
- EDF 207 — Foundations of Education: 3
- EDF 211 — Human Growth and Development: 3
- EDF 311 — Learning Theories and Assessment in Educ: 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

**Components of Degree Requirements**
- General Education: 38
- Track Requirements: 31
- Supplemental Requirements: 12
- Teacher Education Requirements: 30
- General Electives: 9
- **TOTAL PROGRAM REQUIREMENTS**: 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

Chemistry Minor Requirements
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 MINOR REQUIREMENTS 21

*At least 50 percent of the required chemistry coursework in the area 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 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/BIOL 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 — Principles of Human Anatomy and Physiology I 3
BIOL 235 — Principles of Human Anatomy and Physiology II 3
BIOL 304 — Genetics 3
BIOL 380 — Cell Biology 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.

Department of Earth and Space Science

Benjamin Malphrus, Chair
101 Space Science Center
606-783-2381

Earth and Space Science Faculty

Bachelor of Science - Area in Earth System Science (Geology)

The track in geology 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 geoscience area.

Program Competencies

The student will be able to:
1. Identify Earth materials (minerals, rocks, fossils, sediments, soils, etc.)
2. Map and correlate bodies of rock, sediment and soil using surface and subsurface data.
3. Articulate the physical processes that shape Earth’s surface and interior.
4. Apply knowledge of modern geologic processes to interpret the geologic record.
5. Describe methods used to explore for and develop mineral/petroleum/water resources.
6. Assess the suitability of sites for the construction of buildings, roads, dams, landfills, septic systems, waste lagoons, etc.
7. Describe methods used to monitor, reclaim, and remediate sites impacted by mining, improper waste disposal, leaking underground storage tanks, etc.
8. Recognize existing or potential geologic hazards.
9. Describe the details of the inter-relationships between components (atmosphere, hydrosphere, lithosphere, biosphere) of the Earth System.

Program Requirements

General Education
ESS 108/108L — Physical Geology (NSC II) 4
ESS 499C — ESS Senior Thesis; or
*Geology Field Camp 6
MATH 152, MATH 174, or MATH 175 3-4

General Education Total 37-38

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

*Students who intend to pursue a graduate degree should take a geology field camp instead of the capstone. A geology field camp may be substituted for the capstone requirements and must be taken off-campus at an accredited university. 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.

Area Requirements

Area Core Requirements 44-47
ESS 108/108L — Physical Geology (NSC II exchange) 0
ESS 201/201L — Historical Geology 3
ESS 276/276L — Geologic Methods 3
ESS 325/ESS 325L — Earth Structure and Tectonics 4
ESS 350/350L — Geomorphology 3
GEO 349 — Intro to GIS/Cartography 3
ESS 440/440L — Biogeochemical Cycles 3
BIOL 155 — Intro to Environmental Science 3
Take one of the following (in addition to GNED Math): 3-4
MATH 174 or MATH 175 or MATH 275
CHEM 111/111L — Principles of Chemistry I 4
CHEM 112/112L — Principles of Chemistry II 4
Take one of the following sequences: 8-10
PHYS 201 and PHYS 201A — Elementary Physics I & Lab
PHYS 202 and PHYS 202A — Elementary Physics II & Lab
or
PHYS 231 and PHYS 231A — Engineering Physics I & Lab
PHYS 232 and PHYS 232A — Engineering Physics II & Lab
Take one of the following: 3
CIS 101 — Computer Literacy, or
PHYS 270 — Intro to Scientific Computing

Geology Track Requirements 24
ESS 315/315L — Sedimentation and Stratigraphy 4
ESS 362/362L — Mineralogy 4
ESS 363/363L — Petrology 4
ESS 376/376L — Environmental Geology 3
Choose nine hours of upper level ESS electives: 9
ESS/SSE 300 or higher, GEO 351, or GEO 355
Components of Degree Requirements

General Education 37-38
Area Core Requirements 44-47
ESS Geology Track Requirements 24
General Electives 11-15
**TOTAL PROGRAM REQUIREMENTS** 120

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, aerospace 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, 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 implementation.
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, radiative, 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, electronics 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 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.

**Program Requirements**

**General Education**

- ASTR 125 — Astronomical and Physical Methods to Explore the Universe (NSC II) 3
- MATH 175 — Calculus I 4
- SSE 499C — Senior Design Project II 3

**General Education Total** 37

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

**Area Requirements**

**Space Science Requirements** 47

- SSE 120 — Introduction to Satellites and Space Systems 3
- SSE 122 — Satellites and 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

**Supplemental Requirements** 33-34

**Mathematics**

- MATH 275 — Calculus II 4
MATH 276 — Calculus III 4

**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

**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

*SSE 499C is counted in the general education requirements.

**ASTR 311 requires prerequisite ASTR 130 and ASTR 312 requires prerequisite ASTR 311.**

**Components of Degree Requirements**

| General Education | 37 |
| Area Requirements | 47 |
| Supplemental Requirements | 33-34 |
| General Electives | 3 |

**TOTAL PROGRAM REQUIREMENTS** 120-121

**Bachelor of Science - Area in Physics (Astrophysics Track)**

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 Bachelor of Science Area in Physics (astrophysics track).

**Program Requirements**

| General Education | 37 |
| MATH 175 — Calculus I | 4 |
| ASTR 125 — Astronomical and Physics Methods to Explore the Universe (NSC II) | 3 |
| ASTR 499C — Senior Thesis I | 2 |
| ASTR 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.

| Area Requirements | 48 |
| Astrophysics Core Requirements | 48 |
| PHYS 231/PHYS 231A — Engineering Physics I | 5 |
| PHYS 232/PHYS 232A — Engineering Physics II | 5 |
| PHYS 270 — Introduction to Scientific Computing | 3 |
| PHYS 340 — Experimental Physics | 3 |
| PHYS 353 — Concepts of Modern Physics I | 4 |
| PHYS 354 — Concepts of Modern Physics II | 3 |
| PHYS 381 — Computer Solutions to Engineering and Science Problems | 3 |
| PHYS 481 — Mathematics for Engineers and Scientists | 3 |
| MATH 275 — Calculus II | 4 |
| MATH 276 — Calculus III | 4 |
| MATH 363 — Differential Equations | 3 |
| CHEM 111 — Principles of Chemistry I | 4 |
| CHEM 112 — Principles of Chemistry II | 4 |

**Astrophysics Track Requirements**

| Astrophysics Track Requirements | 35 |
| ASTR 130 — Stars, Galaxies and Cosmology | 3 |
| ASTR 311 — Astrophysics I: Stars and Stellar Evolution | 3 |
| ASTR 312 — Astrophysics II: Galaxies and Cosmology | 3 |
| ASTR 324 — Radio Astronomy | 3 |
| ASTR 431 — Space Plasma Physics | 3 |
| ASTR 460 — High Energy Astrophysics | 3 |
| ASTR 498 — Senior Research | 1 |
| PHYS 332 — Electricity and Magnetism | 4 |
| PHYS 391 — Dynamics | 3 |
| PHYS 493 — Quantum Mechanics | 3 |
| ESS 303 — Planetary Geology | 3 |
| Three hours from the following technical electives: | 3 |
| 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 | |

**Components of Degree Requirements**

| General Education | 37 |
| Astrophysics Core Requirements | 48 |
| Astrophysics Track Requirements | 35 |

**TOTAL PROGRAM REQUIREMENTS** 120

**Astronomy Minor**

| Astronomy Minor Requirements | 12 |
| Astronomy and Astrophysics Requirements | 12 |
| ASTR 125 — Astronomical and Physics Methods to Explore the Universe | 3 |
| ASTR 112 — Introductory Astronomy | 3 |
| ASTR 311 — Astrophysics I: Stars and Stellar Evolution | 3 |
| ASTR 312 — Astrophysics II: Galaxies and Cosmology | 3 |

**Track Requirements (Choose one)**

| 8-10 |
| Physics Track I | |
| 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, or | 1 |
### Physics Track II

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<th>Course Title</th>
<th>Credits</th>
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<td>PHYS 231</td>
<td>Engineering Physics I</td>
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<td>PHYS 231A</td>
<td>Engineering Physics I Laboratory</td>
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<tr>
<td>PHYS 232</td>
<td>Engineering Physics II</td>
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<tr>
<td>PHYS 232A</td>
<td>Engineering Physics II Laboratory</td>
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</table>

**Supplemental Requirements (Minimum of one course)**

Choose one course from the following:

- 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

**TOTAL MINOR REQUIREMENTS** 23-25

*Physics majors will take eight additional hours from the supplemental requirement list to substitute for the physics core required.*

### Geology Minor

#### Geology Minor Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ESS 108</td>
<td>Physical Geology</td>
<td>4</td>
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<tr>
<td>ESS 201</td>
<td>Historical Geology</td>
<td>3</td>
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<tr>
<td>ESS</td>
<td>electives approved by advisor</td>
<td>14</td>
</tr>
</tbody>
</table>

**TOTAL MINOR REQUIREMENTS** 21

### Integrated Science Minor

#### Integrated Science Minor Requirements

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.

### Department of Mathematics, Computer Science and Physics

**Mathematics 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

The Department of Mathematics, Computer Science and 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.

### Bachelor of Science - Area in Mathematics

#### Program Requirements

**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>
</tbody>
</table>

**General Education Total** 37

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

**Area Requirements**

**Math Area Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS/MATH 170</td>
<td>Introduction to Computer Science</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 300</td>
<td>Introduction to Mathematical Proof</td>
<td>3</td>
</tr>
<tr>
<td>MATH 301</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 312</td>
<td>Numerical Methods</td>
<td>3</td>
</tr>
<tr>
<td>MATH 350</td>
<td>Introduction to Higher Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 363</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Introduction to Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 410</td>
<td>Introduction to Real Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 481</td>
<td>Math for Engineers and Scientists or</td>
<td>3</td>
</tr>
<tr>
<td>MATH 355</td>
<td>Operations Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 404</td>
<td>Topology</td>
<td>3</td>
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<tr>
<td>MATH 486</td>
<td>Complex Variables</td>
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<tr>
<td>PHYS 231</td>
<td>Engineering Physics I</td>
<td>4</td>
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</tbody>
</table>
PHYS 231A — Engineering Physics I Lab 1
PHYS 232 — Engineering Physics II 4
PHYS 232A — Engineering Physics II Laboratory 1

Components of Degree Requirements
General Education 37
Math Area Requirements 49
General Electives 34
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Science - Area in Mathematics with Teacher Certification (Secondary)

Program Requirements
General Education
MATH 175 — Calculus I 4
MATH 499C — Senior Thesis I 2
MATH 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.

Area Requirements
Math Teaching Requirements 48
CS/MATH 170 — Introduction to Computer Science 4
MATH 275 — Calculus II 4
MATH 276 — Analytic Geometry and Calculus III 4
MATH 300 — Introduction to Mathematical Proof 3
MATH 301 — Elementary Linear Algebra, or
MATH 308 — Discrete Mathematics 3
MATH 350 — Introduction to Higher Algebra 3
MATH 353 — Statistics 3
MATH 365 — Introduction to Mathematical Statistics 3
MATH 370 — College Geometry I 3
MATH 371 — College Geometry II 3
MATH 402 — Integrated Biology, Mathematics and Physical Science Teaching Methods 3
MATH 403 — Integrated Biology, Mathematics and Science Field Experiences in Teaching 3
MATH 410 — Introduction to Real Analysis 3
Electives 6
(Mathematics courses at or above the 300-level, except for MATH 330 and 332, as approved by the department chair.)

Professional Education Requirements 30
EDF 207 — Foundations of Education 3
EDSP 230 — Education of Exceptional Children 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment 3
EDSE 312 — Education Methods and Technology 3
EDSE 483 — Classroom Organ. and Mgt for Sec Teachers 3
EDSE 416 — Clinical Practice 12

Components of Degree Requirements
General Education 37
Math Teaching Requirements 48

Bachelor of Science - Major in Mathematics

Program Requirements
General Education
MATH 175 — Calculus I 4
MATH 499C — Senior Thesis I 2
MATH 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.

Major Requirements
Math Major Requirements 32
CS/MATH 170 — Introduction to Computer Science 4
MATH 275 — Calculus II 4
MATH 276 — Calculus III 4
MATH 300 — Introduction to Mathematical Proof 3
MATH 301 — Elementary Linear Algebra 3
MATH 365 — Introduction to Mathematical Statistics 3
Electives from mathematics courses above 300-level except MATH 330, 332, 353, 354, 402, and 403 as approved by the department chair 11

Components of Degree Requirements
General Education 37
Math Major Requirements 32
Minor 21
General Electives 30
TOTAL PROGRAM REQUIREMENTS 120

Bachelor of Science - Major in Mathematics with Teacher Certification (Secondary)

Program Requirements
General Education
MATH 175 — Calculus 4
MATH 499C — Senior Thesis I 2
MATH 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.

Major Requirements
Math Major Teaching Requirements 32
MATH 170 — Introduction to Computer Science 4
MATH 275 — Calculus II 4
MATH 300 — Introduction to Mathematical Proof 3
MATH 301 — Elementary Linear Algebra or 3
MATH 308 — Discrete Mathematics 3
MATH 350 — Introduction to Higher Algebra 3
MATH 365 — Introduction to Mathematical Statistics 3
MATH 370 — College Geometry I 3
MATH 371 — College Geometry II 3
MATH 402 — Integrated Biology, Mathematics, and Physical Science Teaching Methods 3
MATH 403 — Integrated Biology, Mathematics, and Science Field Experiences in Teaching 3

**Professional Education Requirements** 30
EDF 207 — Foundations of Education 3
EDSP 230 — Education of Exceptional Children 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment 3
EDSE 312 — Education Methods and Technology 3
EDSE 483 — Classroom Organ. & Mgt for Sec Teachers 3
EDSE 416 — Clinical Practice 12

*In addition, the department strongly recommends that teaching majors complete MATH 276 and both Math 301 and 308.*

### Components of Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>37</td>
</tr>
<tr>
<td>Math Major Teaching Requirements</td>
<td>32</td>
</tr>
<tr>
<td>Professional Education Requirements</td>
<td>30</td>
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<tr>
<td>Minor</td>
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<tr>
<td><strong>TOTAL PROGRAM REQUIREMENTS</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

### Mathematics Minor

**Mathematics Minor Requirements**

- CS/MATH 170 — Introduction to Computer Science 4
- MATH 175 — Calculus I 4
- MATH 275 — Calculus II 4
- Electives from MATH 174, 276, or other mathematics courses at or above the 300-level except MATH 330, 332, 353, 305, 402 and 403 as approved by the department chair 13

**TOTAL MINOR REQUIREMENTS** 25

### Statistics Minor

**Statistics Minor Requirements**

**Track 1: Noncalculus**
- Elective in Mathematics, from 152-199 level 3
- MATH 301 — Elementary Linear Algebra 3
- MATH 353 — Statistics 3
- MATH 355 — Operations Research 3
- MATH 455 — Linear Statistical Models 3
- MATH 453 — Concepts in the Design of Experiments 3
- MATH 456 — Nonparametric Statistics 3

**TOTAL MINOR REQUIREMENTS (Noncalculus)** 21

**Track 2: Calculus**
- MATH 301 — Elementary Linear Algebra 3
- MATH 355 — Operations Research 3
- MATH 365 — Introduction to Mathematical Statistics 3
- MATH 419 — Probability 3
- MATH 420 — Mathematical Statistics 3
- MATH 453 — Concepts in the Design of Experiments 3
- MATH 455 — Linear Statistical Models or 3
- MATH 456 — Nonparametric Statistics 3
- MATH 465 — Concepts in the Design of Experiments 3
- MATH 466 — Linear Statistical Models 3

**TOTAL MINOR REQUIREMENTS (Calculus)** 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 and 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.

### Bachelor of Science - Area in Computer Science

**Program Requirements**

**General Education**
- MATH 175 — Calculus I 4
- CS 499C — Senior Thesis I 2
- CS 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.*

**Area Requirements**

**Computer Science Requirements** 36
- CS 170 — Introduction to Computer Science 4
- CIS 205 — Introduction to Programming C++ 3
- CIS 426 — Database Administration 3
- CS 303 — Data Structure 3
- CS 310 — Algorithms and Adv. Data Structures 3
- CS 335 — Theory of Programming Languages 3
- CS 360 — Operating Systems 3
- CS 380 — Software Engineering 3
- PHYS 201 and 201A — Elementary Physics I 4
- PHYS 202 and 202A — Elementary Physics II 4
- PHIL 103 — Beginning Ethics 3
**Supplemental Requirements**  
MATH 275 — Calculus II  
MATH 308 — Discrete Mathematics  
MATH 365 — Intro. to Mathematical Statistics  

**Track Requirements**

**Computer Science General Track**
CS 499D  
CS 499C  
MATH 175  

**Computer Science Area Requirements**
General Education Total  
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, CIS 442, CIS 443, ITEC 445, ITEC 480, MATH 276, MATH 301, MATH 312, PHYS 381  

**Computer Gaming Track**
CS 172 — Computer Gaming Concepts  
CS 212 — Game Implementation Technique  
CS 312 — Game Prototype Design and Implementation  
CS 372 — Math for Computer Games  
CS 412 — Software Engineering for Computer Games  
CS 472 — Multiplayer Networking Game Programming  

**Computer and Networking Security Track**
CS 480 — Computer Security  
CS 485 — Network Security  
CS 420 — Data Mining Concepts  
MATH 320 — Codes and Cryptography  
CIS 340 — Telecommunications and Networking  
CIS 322 — Systems Security & Information Assurance  
ITEC 345 — Microprocessor Electronics  

**Components of Degree Requirements**
General Education  
Computer Science Area Requirements  
Track Requirements  
General Electives  

**TOTAL PROGRAM REQUIREMENTS** 120

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**Bachelor of Science - Major in Computer Science**

**Program Requirements**

**General Education**
MATH 175 — Calculus I  
CS 499C — Senior Thesis I  
CS 499D — Senior Thesis II  

**General Education Total** 37  
Refer to the General Education section for a complete listing of general education requirements for the University.

**Major Requirements**

**Computer Science Major Requirements** 38  
CS/MATH 170 — Introduction to Computer Science  
CIS 205 — Introduction to Programming C++  
CS 303 — Data Structures  
CS 310 — Algorithms and Advanced Data Structures  
CS 360 — Operating Systems  
CS 380 — Software Engineering  

**Required Math Courses**
MATH 275 — Calculus II  
MATH 308 — Discrete Mathematics  
MATH 353 — Statistics  

**Electives**
Select two of the following courses with a CS prefix: 6  
CS 335 — Theory of Programming Languages  
CS 372 — Math for Computer Games  
CS 412 — Software Engineering for Computer Games  
CS 420 — Data Mining Concepts  
CS 450 — Computer Graphics  
CS 460 — Scientific and Parallel Computing  
CS 472 — Multiplayer Networking Game Programming  
CS 480 — Computer Security  
CS 485 — Network Security  

Select one course from the following: 3  
CIS 305 — Advanced Programming C++  
CIS 314 — Java Programming  
CIS 405 — Web Dev Strategies and E-commerce  
CIS 426 — Database Administration  
CIS 340 — Telecommunications and Networking  
CIS 442 — Network Administration  
CIS 443 — Advanced Computer Networking Adm.  
ITEC 345 — Microprocessor Electronics  
ITEC 445 — Computer Electronics  
ITEC 480 — Digital Communications and Networking  
MATH 301 — Linear Algebra  
MATH 312 — Numerical Methods

**Components of Degree Requirements**
General Education 37  
Computer Science Major Requirements 38  
Minor 21  
General Electives 24  

**TOTAL PROGRAM REQUIREMENTS** 120

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**Computer Science Minor**

**Computer Science Minor Requirements**

**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  

**Electives**
Choose three courses from the following: 9  
At least two 300- or 400-level three-hour courses with a CS prefix. At most, one elective chosen from CS Area 300-level or above.

**TOTAL MINOR REQUIREMENTS** 22
Computer Gaming Minor

Computer Gaming Minor Requirements
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  3

TOTAL MINOR REQUIREMENTS  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 track 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 applied physics tracks.

Bachelor of Science - Area in Physics

Track 1: Computational Physics

Program Requirements
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.

Area Requirements
Core Courses  48
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

Track 2: Engineering Physics (Mechanical)

Program Requirements
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.

Area Requirements
Core Courses  48
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
Components of Degree Requirements

General Education 37
Physics Area Requirements 48
Track 2 Requirements 24
Electives 11

TOTAL PROGRAM REQUIREMENTS 120

Track 3: Engineering Physics (Electrical)

Program Requirements

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.

Area Requirements

Core Courses 48
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
MATH 340 — Experimental Physics 3
MATH 353 — Concepts of Modern Physics I 4
PHYS 354 — Concepts of Modern Physics II 3
MATH 363 — Differential Equations 3
PHYS 381 — Computer Solutions to Engineering and
Science Problems 3
PHYS 481 — Mathematics for Engineers and Scientists 3

Track 3: Engineering Physics (Electrical) Requirements 25
PHYS 332 — Electricity and Magnetism 4
PHYS 361 — Fundamentals of Electronics 3
PHYS 411 — Thermodynamics 3
IETC 241 — AC Circuits 3
IETC 242 — Principles of Communications 3
IETC 342 — Electronic Devices and Circuits 3

ITEC, MATH, PHYS, or SSE electives approved by advisor 6

Components of Degree Requirements

General Education 37
Physics Area Requirements 48
Track 3 Requirements 25
Electives 10

TOTAL PROGRAM REQUIREMENTS 120

Track 4: Astrophysics

The Department of Math, Computer Science and Physics, in conjunc-
tion with the Department of Earth and Space Science, offer
core and supplemental courses for the Bachelor of Science Area in
Physics (astrophysics track).
See the Department of Earth and Space Science for the astrophys-
tics track program requirements.

Track 5: Physics Teaching

Program Requirements

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.

Area Requirements

Core Courses 48
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
MATH 340 — Experimental Physics 3
PHYS 353 — Concepts of Modern Physics I 4
PHYS 354 — Concepts of Modern Physics II 3
MATH 363 — Differential Equations 3
PHYS 381 — Computer Solutions to Engineering and
Science Problems 3
PHYS 481 — Mathematics for Engineers and Scientists 3

Track 5: Physics Teaching Requirements 48
PHYS 109 — History of the Universe, or 3
ASTR 125 — Methods to Explore the Universe
PHYS 411 — Thermodynamics 3
SCI 402 — Integrated Biology, Math and Physical Sciences
Teaching Methods 3
SCI 403 — Integrated Biology, Mathematics and Physical
Sciences Field Experiences in Teaching 3

Professional Education Requirements 30
EDF 207 — Foundations of Education 3
EDF 211 — Human Growth and Development 3
EDF 311 — Learning Theories and Assessment in Educ 3
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 Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>37</td>
</tr>
<tr>
<td>Physics Area Requirements</td>
<td>48</td>
</tr>
<tr>
<td>Track I and Professional Education</td>
<td>42</td>
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<td><strong>TOTAL PROGRAM REQUIREMENTS</strong></td>
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</table>

Bachelor of Science - Physics Major

Program Requirements

<table>
<thead>
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<th>Requirement</th>
<th>Credit Hours</th>
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<tr>
<td>General Education</td>
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<tr>
<td>PHYS 499C — Senior Thesis I</td>
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<td>PHYS 499D — Senior Thesis II</td>
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<tr>
<td><strong>General Education Total</strong></td>
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</table>

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

Major Requirements

<table>
<thead>
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<tbody>
<tr>
<td>Core Courses</td>
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<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 270 — Introduction to Scientific Computing</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 231/231A — Engineering Physics I</td>
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<tr>
<td>PHYS 232/232A — Engineering Physics II</td>
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<tr>
<td>PHYS 340 — Experimental Physics</td>
<td>3</td>
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<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>3</td>
</tr>
<tr>
<td>PHYS 361 — Fundamentals of Electronics</td>
<td>3</td>
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<tr>
<td><strong>Supplemental Requirements</strong></td>
<td><strong>11</strong></td>
</tr>
<tr>
<td>MATH 275 — Calculus II</td>
<td>4</td>
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<tr>
<td>MATH 276 — Calculus III</td>
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</tr>
<tr>
<td>MATH 363 — Differential Equations</td>
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<tr>
<td><strong>Track Requirements (choose one)</strong></td>
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<tr>
<td>Track I: Professional Physics (intended for students who wish to pursue graduate studies in Physics)</td>
<td>10</td>
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<tr>
<td>PHYS 332 — Electricity &amp; Magnetism</td>
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</tr>
<tr>
<td>PHYS 391 — Dynamics</td>
<td>3</td>
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<tr>
<td>PHYS 493 — Quantum Mechanics</td>
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<tr>
<td>Track II: Applied Physics (intended for students who wish to pursue careers or graduate/professional studies other than physics)</td>
<td>10</td>
</tr>
<tr>
<td>PHYS 350 — Nuclear Science</td>
<td>4</td>
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<tr>
<td>PHYS 411 — Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 400 — Philosophy of Science</td>
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</tbody>
</table>

Components of Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
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<tr>
<td>Physics Major Requirements</td>
<td>34</td>
</tr>
<tr>
<td>Supplemental Requirements</td>
<td>11</td>
</tr>
<tr>
<td>Track Requirements</td>
<td>10</td>
</tr>
<tr>
<td>Minor</td>
<td>21</td>
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<tr>
<td><strong>General Electives</strong></td>
<td><strong>7</strong></td>
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<tr>
<td><strong>TOTAL PROGRAM REQUIREMENTS</strong></td>
<td><strong>120</strong></td>
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Physics Minor

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>PHYS 231 — Engineering Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 231A — Engineering Physics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 232 — Engineering Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232A — Engineering Physics II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 350 — Nuclear Science</td>
<td>4</td>
</tr>
<tr>
<td>PHYS — electives, approved by advisor</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL MINOR REQUIREMENTS</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

*At least 50 percent of the coursework in the major, area or minor in physics must be taken in residency.

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 Two-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.
### Two-Two Program Requirements

- **CHEM 111** — Principles of Chemistry I  
  4
- **CHEM 112** — Principles of Chemistry II  
  4
- **COMS 108** — Fundamentals of Speech Communication  
  3
- **ENG 100** — Writing I  
  3
- **ENG 200** — Writing II  
  3
- **MATH 175** — Calculus I  
  4
- **MATH 275** — Calculus II  
  4
- **MATH 276** — Calculus III  
  4
- **MATH 363** — Differential Equations  
  3
- **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

Select two courses from the following:
- **MATH 260** — FORTRAN Programming  
  3
- **PHYS 221** — Statics  
  3
- **PHYS 411** — Thermodynamics  
  3

**TOTAL TWO-TWO PROGRAM REQUIREMENTS**  
48

*General Education Courses*  
16

*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

**Gregory Corso, Chair**  
414 Reed Hall  
606-783-2981

**Psychology Faculty**  

**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 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.

### Assessment Procedures

- Senior capstone course
- Exit examination

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 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.

### Bachelor of Science - Area in Psychology

**Program Requirements**

**General Education**
- **PSY 499C** — Systems and Theories  
  3

**General Education Total**  
36

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

**Area Requirements**

**Area Core Requirements**  
24
- **PSY 156** — Lifespan Development Psychology  
  3
- **PSY 281/281L** — Experimental Design and Analysis I  
  3
- **PSY 282/282L** — Experimental Design and Analysis II  
  3
- **PSY 354** — Introduction to Social Psychology  
  3
- **PSY 380** — Cognitive Psychology  
  3
- **PSY 390** — Psychology of Personality  
  3
- **PSY 421** — Physiological Psychology  
  3
- **PSY 489** — Psychology of Learning  
  3

**Area Elective Requirements**  
24
- **PSY 157**  
- **PSY 199**  
- **PSY 223**  
- **PSY 276**  
- **PSY 300**  
- **PSY 321**  
- **PSY 339**  
- **PSY 353**  
- **PSY 356**  
- **PSY 358**  
- **PSY 359**  
- **PSY 360**  
- **PSY 369**  
- **PSY 384**  
- **PSY 399**  
- **PSY 422**  
- **PSY 450**  
- **PSY 452**  
- **PSY 456**  
- **PSY 465**  
- **PSY 469**  
- **PSY 470**  
- **PSY 471**  
- **PSY 472**  
- **PSY 475**  
- **PSY 477**  
- **PSY 486**

**Components of Degree Requirements**

**General Education**  
36
**Area Requirements**  
48
**General Electives**  
36

**TOTAL PROGRAM REQUIREMENTS**  
120

### Bachelor of Science - Psychology Major

**Program Requirements**

**General Education**
- **PSY 499C** — Systems and Theories  
  3

**General Education Total**  
36

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

**Major Core Requirements**  
24
- PSY 156 — Lifespan Development Psychology 3
- PSY 281/281L — Experimental Design and Analysis I 3
- PSY 282/282L — Experimental Design and Analysis II 3
- PSY 354 — Introduction to Social Psychology 3
- PSY 380 — Cognitive Psychology 3
- PSY 390 — Psychology of Personality 3
- PSY 421 — Physiological Psychology 3
- PSY 489 — Psychology of Learning 3

**Major Elective Requirements**  
6
PSY 157, PSY 223, PSY 300, PSY 321, PSY 353, PSY 356, PSY 358, PSY 359, PSY 360, PSY 369, PSY 384, PSY 399, PSY 422, PSY 450, PSY 452, PSY 456, PSY 465, PSY 469, PSY 471, PSY 475, PSY 477, PSY 486

**Components of Degree Requirements**

General Education 36
Major Requirements 30
Minor 21
General Electives 33
**TOTAL PROGRAM REQUIREMENTS** 120

Psychology Minor

**Psychology Minor Requirements**

*PSY 154 — Introduction to Psychology 3
PSY Electives 21
**TOTAL MINOR REQUIREMENTS** 24

*Students choosing a minor in psychology may not use PSY 154 to meet the SBS II general education category requirement.

Health Promotion

**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 of 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 - Area in Health Promotion**

**Program Requirements**

**General Education**

- HLTH 230 — Community Health (SBS I) 3
- HLTH 499C — Senior Seminar in Health Promotion 3
General Education Total 36

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

Area Requirements

Health Promotion Requirements 54

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>HLTH 151</td>
<td>Wellness: Theory in Action</td>
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<tr>
<td>HPE 160</td>
<td>Foundations of Health and Physical Education</td>
<td>3</td>
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<td>HLTH 203</td>
<td>Safety and First Aid</td>
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<td>HLTH 205</td>
<td>Psychological Health</td>
<td>3</td>
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<tr>
<td>HLTH 206</td>
<td>Principles of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 310</td>
<td>Health and Wellness Promotion</td>
<td>3</td>
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<tr>
<td>HLTH 360</td>
<td>Family Health</td>
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<td>HLTH 408</td>
<td>General School Safety or</td>
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<tr>
<td>HLTH 475</td>
<td>The School Health Program</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 414</td>
<td>Principles of Epidemiology</td>
<td>3</td>
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<td>HLTH 418</td>
<td>Use and Abuse of Drugs</td>
<td>3</td>
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<tr>
<td>HLTH 425</td>
<td>Planning, Managing and Evaluating Health/Wellness Programs</td>
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<td>HLTH 435</td>
<td>Health Counseling</td>
<td>3</td>
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<tr>
<td>HLTH 471</td>
<td>Practicum in Health Promotion</td>
<td>12</td>
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<tr>
<td>PHED 306</td>
<td>Functional Anatomy/Biomechanics or</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 234</td>
<td>Principles of Human Anatomy and Physiology I</td>
<td>3</td>
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Components of Degree Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
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<tr>
<td>General Education</td>
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<td>Major Requirements</td>
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<td>General Electives</td>
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<td>TOTAL PROGRAM REQUIREMENTS</td>
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</table>

Special Elective Requirements 6

Select two from the following:

SOC 441, SOC 445, COMS 350, HLTH 475, HLTH 480

Components of Degree Requirements

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
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</table>

Bachelor of Arts - Health Promotion Major

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.

Program Requirements

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>HLTH 230</td>
<td>Community Health (SBS I)</td>
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<tr>
<td>HLTH 499C</td>
<td>Senior Seminar in Health Promotion</td>
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<td>General Education Total</td>
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Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Major Requirements

Health Promotion Requirements 48

<table>
<thead>
<tr>
<th>Course</th>
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<td>Principles of Nutrition</td>
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<td>Major Requirements</td>
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Health Minor

Health Minor Requirements

Core 12

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>HLTH 151</td>
<td>Wellness: Theory in Action</td>
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<td>Community Health</td>
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<td>HLTH 414</td>
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<td>Electives</td>
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</table>

Choose three courses (nine hours) from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HLTH 205</td>
<td>Psychological Health</td>
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<td>HLTH 418</td>
<td>Use and Abuse of Drugs</td>
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<td>HLTH 430</td>
<td>Consumer Health</td>
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<tr>
<td>HLTH 435</td>
<td>Health Counseling</td>
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<tr>
<td>HLTH 475</td>
<td>The School Health Program</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL MINOR REQUIREMENTS 21

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

Bachelor of Arts - Area in Health and Physical Education with Teacher Certification (P-12)

Program Requirements

General Education
HLTH 230 — Community Health (SBS I) 3
EDF 211 — Human Growth and Development (SBS II) 3
HPE 499C — Senior Seminar in Health/Physical Education 3

Education Teaching
HLTH 230
HPE 499C — Senior Seminar in Health/Physical Education 3

General Education Total 36
Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Area Requirements

HPE Requirements 63
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
HPE 300 — Methods of Teaching Elem Physical Education 3
HPE 301 — Classroom Assessment in Health/Physical Education 3
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 and 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 Athletics and 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

Professional Education Requirements 24
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 Management for Secondary Teachers 3

Components of Degree Requirements
General Education 36
Area Requirements 63
Professional Education Requirements 24

TOTAL PROGRAM REQUIREMENTS 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 Major with Teacher Certification (P-12)

Program Requirements
A minor is needed for this program.

General Education
HLTH 230 — Community Health (SBS I) 3
EDF 211 — Human Growth and Development (SBS II) 3
HPE 499C — Senior Seminar in Health/Physical Education 3

Education Teaching
HLTH 230
HPE 499C — Senior Seminar in Health/Physical Education 3

General Education Total 36
Refer to the General Education section for a complete listing of general education courses and requirements for the University.

Major Requirements

Health Education Requirements 33
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 and 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

Professional Education Requirements 27
EDF 207 — Foundations of Education 3
EDF 311 — Learning Theories and Assessment in Education 3
EDSE 312 — Educational Methods and Technology 3
EDSP 230 — Teaching the Exceptional Student 3
PHED 475 — Adapted Physical Education 3
Components of Degree Requirements

<table>
<thead>
<tr>
<th>General Education</th>
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<tbody>
<tr>
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TOTAL PROGRAM REQUIREMENTS | 120 |

Bachelor of Arts - Physical Education Major with Teacher Certification (P-12)

Program Requirements

A minor is needed for this program.

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>EDF 211 — Human Growth and Development (SBS II)</td>
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<tr>
<td>HPE 499C — Senior Seminar in Health/Physical Education Teaching</td>
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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.

Major Requirements

Physical Education Requirements | 39 |

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>PHED 213 — Methods of Teaching Individual Sports</td>
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<tr>
<td>PHED 215 — Methods of Teaching Team Sports</td>
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<tr>
<td>PHED 216 — Methods of Teaching Lifetime Sports</td>
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</tr>
<tr>
<td>PHED 217 — Methods of Teaching Gymnastics and the Martial Arts</td>
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<tr>
<td>PHED 218 — Methods of Teaching Dance</td>
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<td>PHED 306 — Functional Anatomy/Biomechanics</td>
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<td>PHED 315 — Motor Development and Motor Learning</td>
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<tr>
<td>PHED 430 — The Psychosocial Dimensions of Sport and Physical Activity</td>
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<td>HPE 160 — Foundations of Health &amp; Physical Education</td>
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<td>HPE 300 — Methods of Teaching Elementary PE</td>
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<td>HPE 301 — Classroom Assessment in Hlth and Phys Ed</td>
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<td>HPE 303 — Methods of Teaching Secondary PE</td>
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Professional Education Requirements | 24 |

<table>
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<tr>
<th>Course</th>
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<td>EDF 207 — Foundations of Education</td>
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<td>EDF 311 — Learning Theories and Assessment in Ed</td>
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<td>EDSE 312 — Educational Methods and Technology</td>
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<tr>
<td>EDSE 416 — Clinical Practice</td>
<td>12</td>
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<tr>
<td>EDSE 483 — Classroom Organization and Management for Secondary Teachers</td>
<td>3</td>
</tr>
</tbody>
</table>

Components of Degree Requirements

<table>
<thead>
<tr>
<th>General Education</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Requirements</td>
<td>39</td>
</tr>
<tr>
<td>Professional Education Requirements</td>
<td>24</td>
</tr>
<tr>
<td>Minor</td>
<td>21</td>
</tr>
</tbody>
</table>

TOTAL PROGRAM REQUIREMENTS | 120 |

Bachelor of Science - Area in Exercise 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 of 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.
6. Knowledge of wellness programs for all populations.

Assessment Procedures

Portfolios
ACSM HFI Exam
Employment Data
Internship Data

Program Requirements

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHED 499D — Senior Capstone in Exercise Science</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Total | 36 |

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

Area Requirements

Exercise Science Area | 68 |

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 151 — Wellness: Theory in Action</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 234 — Principles of Human Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 235 — Principles of Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 203 — Safety and First Aid</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 206 — Prin. of Nutrition or NUTR 201</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 310 — Health and Wellness Promotion</td>
<td>3</td>
</tr>
<tr>
<td>HPE 160 — Foundations of Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PHED 205 — Lifetime Fitness</td>
<td>3</td>
</tr>
<tr>
<td>PHED 220 — Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>PHED 301 — Evaluation in Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>PHED 306 — Functional Anatomy and Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHED 315 — Motor Development and Motor Learning</td>
<td>3</td>
</tr>
<tr>
<td>PHED 326 — Exercise Program Leadership</td>
<td>3</td>
</tr>
<tr>
<td>PHED 332 — Principles of Strength and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>PHED 423 — Exercise Management of Special Populations</td>
<td>3</td>
</tr>
</tbody>
</table>
Respiratory Care Program

The Respiratory Care Program is a consortium between Morehead State University, Maysville Community and Technical College, and Ashland Community and Technical College. Morehead State University students, as a part of the consortium, complete all general education program requirements on the MSU campus. Respiratory care courses are taught on the Rowan campus of Maysville Community and Technical College.

The program prepares the graduate to take an active role in the maintenance and/or restoration of cardiopulmonary homeostasis. The curriculum includes intensive course work in the supporting sciences and general education areas. Classroom instruction is supplemented with learning experience in the campus laboratory and area affiliates. Students enrolled in the Respiratory Care Program are required to achieve a minimum grade of “C” in all courses required for completion of the AAS in Respiratory Care.

Admission Requirements and Procedures

The AAS in Respiratory Care Program has a selective admission process. Enrollment in the program is limited (because of laboratory and classroom space) and student applications are assessed using a point-based system that includes student ACT score/Compass scores and grades. In the event there are more qualified applicants than available positions, one to three alternates will be placed on a waiting list.

Application Procedure

1. Be unconditionally admitted to MSU.
2. Declare Respiratory Care as academic program.
3. University/undergraduate catalog(s) required if transfer credit is sought.
4. Course syllabi for all respiratory care courses complete if transfer credit is sought.
5. Enroll in required prerequisite courses as outlined in the respiratory care curriculum sequence.
6. 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. Current and legible copy of transcript from Morehead State University. Currently enrolled students may submit an unofficial transcript printed from the MSU secure website.
   d. Official high school transcript or GED certificate.
   e. Attendance at a preadmission conference or meeting with the program coordinator.
   f. Documentation of observation hours. (Observation form may be submitted after November 15 if observation hours are not yet completed.)

Student selection process occurs in the fall semester preceding spring admission. To be considered for official admission to the Respiratory Care Program, all materials must be submitted to the program coordinator before November 15 preceding spring admission.
Admission Criteria

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.

Applicants to the Respiratory Care Program are selected based upon the following criteria:

1. American College Test (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.

Respiratory courses will be taken at the Rowan campus of Maysville Community and Technical College on Mondays, Wednesdays and Fridays.

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.

Program Requirements

A total of 72 credit hours is required for the AAS degree. 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 Health, Wellness and Human Performance.

Respiratory Care Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP 110</td>
<td>Cardiopulmonary Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>RCP 120</td>
<td>Theory and Principles of Respiratory Care</td>
<td>4</td>
</tr>
<tr>
<td>RCP 130</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>RCP 125</td>
<td>Cardiopulmonary Evaluation</td>
<td>4</td>
</tr>
<tr>
<td>RCP 150</td>
<td>Clinical Practice I</td>
<td>2</td>
</tr>
<tr>
<td>RCP 175</td>
<td>Clinical Practice II</td>
<td>3</td>
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<tr>
<td>RCP 180</td>
<td>Ventilatory Support</td>
<td>3</td>
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<tr>
<td>RCP 190</td>
<td>Advanced Ventilatory Support</td>
<td>2</td>
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<tr>
<td>RCP 200</td>
<td>Clinical Practice III</td>
<td>3</td>
</tr>
<tr>
<td>RCP 204</td>
<td>Emergency and Special Procedures</td>
<td>3</td>
</tr>
<tr>
<td>RCP 210</td>
<td>Cardiopulmonary Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>RCP 212</td>
<td>Neonatal/Pediatric Respiratory Care</td>
<td>3</td>
</tr>
<tr>
<td>RCP 214</td>
<td>Advanced Diagnostic Procedures</td>
<td>3</td>
</tr>
<tr>
<td>RCP 225</td>
<td>Clinical Practice IV</td>
<td>3</td>
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<tr>
<td>RCP 228</td>
<td>Preventive and Long-Term Respiratory Care</td>
<td>2</td>
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<tr>
<td>RCP 250</td>
<td>Clinical Practice V</td>
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Supplemental Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 234</td>
<td>Principles of Human Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 235</td>
<td>Principles of Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 154</td>
<td>Introduction to Psychology, or</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
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Components of Degree Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
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<tbody>
<tr>
<td>General Education</td>
<td>15</td>
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<tr>
<td>Respiratory Care Requirements</td>
<td>47</td>
</tr>
<tr>
<td>Supplemental Requirements</td>
<td>10</td>
</tr>
</tbody>
</table>

TOTAL PROGRAM REQUIREMENTS: 72

Department of Imaging Sciences

Wretha G. Goodpaster, Interim Chair
210 Center for Health, Education and Research (CHER)
606-783-2646

Imaging Sciences Faculty

J. Applegate, M. Cooper (Clinical Coordinator), J. Darling, L. Donathan, J. Fannin (Clinical Coordinator), C. Gibbs (Computed Tomography/Magnetic Resonance Coordinator), W. Goodpaster (Interim Chair/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 (BS) with areas in computed tomography/magnetic resonance, diagnostic medical sonography and leadership in medical imaging.

Radiologic Science

The associate degree program in Radiologic Science 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 practice 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 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".
   - **Choose one of the following groups:**
     - BIOL 234 — Principles of Human Anatomy and Physiology I and BIOL 235 — Principles of Human Anatomy and Physiology (six hours) **or**
     - BIOL 244 — Human Anatomy and Physiology I, BIOL 244A — Human Anatomy and Physiology I Lab, BIOL 245 — Human Anatomy and Physiology II, and BIOL 245A — Human Anatomy and Physiology II Lab (eight hours)
   - CIS 101 — Computer Literacy
   - COMS 108 — Fund. of Speech Communication
   - ENG 100 — Writing I
   - MATH 152 — College Algebra (MATH 174 or MATH 175 also acceptable)
   - *FYS 101 — First Year Seminar
   - IMS/NURS 202 — Medical Terminology
   - PSY 154 — Introduction to Psychology
   - **RSCI 110 — Introduction to Radiologic Sciences**
   - ***General education distribution or ENG 200 — Writing II

**Total Required Pre-Radiologic Courses: 30**
*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.

**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.

a. 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).

b. A GPA of 2.5 or higher (with no rounding) in the required pre-radiologic science courses (FYS 101 is not calculated in the GPA) and a cumulative GPA of 2.0 on all college work.

c. Meet the established health and physical capability requirements as listed below.
   1. Vision capabilities:
      - Normal or corrected refraction within the range of 20/20 to 20/60.
   2. Auditory capabilities:
      - Able to distinguish color shade changes.
   3. Tactile capabilities:
      - Possess in at least one hand the ability to perceive temperature change and pulsation and to differentiate between various textures and structures.
   4. Language capabilities:
      - Possess the ability to verbally communicate.
   5. Minimal motor capabilities:
      - Grasp securely with two functional upper limbs.
      - Push and/or pull moveable objects weighing 100-150 lbs.
      - Lift at least 25 lbs. without assistance.
      - Stand for long periods of time.
      - Walk without assistance of canes, crutches, walkers, and/or humans.
      - Reach above shoulders and below waist.
      - 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:
      - Negative PPD and/or chest x-ray within immediate past 12 months.
      - Rubella and rubeola antibody test (titer values that indicate immunity) documentation of MMR (rubella and rubeola and mumps) vaccine.
      - Hepatitis B Vaccine series.
      - Varicella zoster live-virus vaccine or reliable history of varicella (chicken pox) or serologic evidence of immunity.
      - 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.
      - 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 documenting all courses required for admission.
3. Copy of course description(s) if transfer credit sought.

b. Mail complete application packet to:
   Morehead State University
   Dept. of Imaging Sciences
   Associate of Applied Science in Radiologic Science
   Academic Counseling Coordinator
   CHER 210D
   Morehead, KY 40351
   Phone: 606-783-2624

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 of Applied Science - Radiologic Science

Program Requirements

**General Education**

FYS 101 — First Year Seminar 3
ENG 100 — Writing I 3
ENG 200 — Writing II 3
COMS 108 — Fundamentals of Speech Communication 3
MATH 152 — College Algebra (Math 174 or MATH 175 also acceptable) 3

**General Education Total** 15

**AAS Requirements**

**Radiologic Science Requirements** 49

- 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

**Supplemental Requirements** 14-16

Choose one of the following groups:

- BIOL 234 — Principles of Human Anatomy and Physiology I, and BIOL 235 — Principles of Human Anatomy and Physiology II, OR
- BIOL 244 — Human Anatomy and Physiology I, BIOL 244A — Human Anatomy and Physiology I Lab, BIOL 245 — Human Anatomy and Physiology II, and BIOL 245A — Human Anatomy and Physiology II Lab

- CIS 101 — Computer Literacy 3
- IMS/NURS 202 — Medical Terminology 2
- PSY 154 — Introduction to Psychology 3

*Consideration may be granted for this course to be completed after admission during the first semester.

**Components of Degree Requirements**

General Education 15
Radiologic Science Requirements 49
Supplemental Requirements 14-16

**TOTAL PROGRAM REQUIREMENTS** 78-80

**Imaging Sciences**

The Baccalaureate Degree Imaging Sciences Program is a four-year program of study with areas 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 GPA 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):

- **Choose one of the following groups:**
  - BIOL 234 — Principles of Human Anatomy and Physiology I and BIOL 235 — Principles of Human Anatomy and Physiology (six hours) or
  - BIOL 244 — Human Anatomy and Physiology I, BIOL 244A — Human Anatomy and Physiology I Lab, BIOL 245 — Human Anatomy and Physiology II, and BIOL 245A — Human Anatomy and Physiology II Lab (eight hours)
  - CIS 101 — Computer Literacy
  - COMS 108 — Fund. of Speech Communication
  - ENG 100 — Writing I
  - ENG 200 — Writing II
  - MATH 152 — College Algebra
  - IMS/NURS 202 — Medical Terminology
  - HUM I and HUM II — Humanities Distribution
  - NSC I and NSC II — Natural Sciences Distribution
  - SBS I and SBS II — Social and Behavioral Science
  - *FYS 101 — First Year Seminar

**Total General Education and Support Courses: 41-43**

*Transfer students with more than 24 credit hours are exempt from this course and must complete an additional social and behavioral science course to meet general education requirements. FYS 101 or the 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:

1. **Vision capabilities:**
   - Normal or corrected refraction within the range of 20/20 to 20/60.
   - Able to distinguish color shade changes.

2. **Auditory capabilities:** possess normal or corrected hearing ability within 0 to 45-decibel range.

3. **Tactile capabilities:**
   - Possess in at least one hand the ability to perceive temperature change and pulsation and to differentiate between various textures and structures.
   - Recognize an object by touching and handling.

4. **Language capabilities:** possess the ability to verbally communicate.

5. **Minimal motor capabilities:**
   - Grasp securely with two functional upper limbs.
   - Push and/or pull moveable objects weighing 100-150 lbs.
   - Lift at least 25 lbs. without assistance.
   - Stand for long periods of time.
   - Walk without assistance of canes, crutches, walkers and/or humans.
   - Reach above shoulders and below waist.
   - 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 transmissible disease** as documented by:
   - Negative PPD and/or chest x-ray within immediate past 12 months.
   - Rubella and rubeola antibody test (titer values that indicate immunity) documentation of MMR (rubella and rubeola and mumps) vaccine.
   - Hepatitis B Vaccine series.
   - Varicella zoster live-virus vaccine or reliable history of varicella (chicken pox) or serologic evidence of immunity.
   - 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 606-783-2624 for further information regarding screening.
This notice has been adopted and modified from Frank G. Shellock website, www.MRISafety.com.

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 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 GPA 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. 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: 606-783-2624

Requirements for Completion of a Bachelor of Science Degree in Imaging Sciences

a. Complete a minimum of 135 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 in 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 solid dark gray uniforms, white hose (if applicable), white or black clinical shoes, dark gray 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.

Bachelor of Science - Area in Computed Tomography/Magnetic Resonance

Computed Tomography Goals and Student Learner Outcomes
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.

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.

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.

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 computed tomography and procedure specifics.

**Magnetic Resonance Goals and Student Learner Outcomes**

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.

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.

Student will model professionalism.

- Student learner outcomes:
  - Students analyze the importance of professionalism in the practice of imaging.
  - Students participate at a professional imaging activity.

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

**Program Requirements**

**General Education**

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.

**Area Requirements**

**CTMR Requirements** 40
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

**Supplemental Requirements** 60-62

Choose one of the following:

- BIOL 234 — Principles of Human Anatomy and Physiology I and BIOL 235 — Principles of Human Anatomy and Physiology II, OR
- BIOL 244 — Human Anatomy and Physiology I, BIOL 244A — Human Anatomy and Physiology I Lab, BIOL 245 — Human Anatomy and Physiology II, and BIOL 245A — Human Anatomy and Physiology II Lab
- CIS 101 — Computer Literacy 3
- IMS/NURS 202 — Medical Terminology 2

Choose 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

*Course hours included only in general education total.

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
CTMR Area Requirements 40
Supplemental Requirements 60-62

**TOTAL PROGRAM REQUIREMENTS** 136-138

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.
Bachelor of Science - Area in Diagnostic Medical Sonography

Student Goals and Outcomes

Student will:

a. Be prepared to practice as competent entry level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.
1. Students manipulate equipment controls to provide optimum image quality.
2. Students recognize and differentiate various pathologies.
3. Students exhibit professional and ethical behavior during sonographic procedures.
4. Students complete the diagnostic medical sonography program and gain employment.
5. Graduates pass the American Registry of Diagnostic Medical Sonographers credentialing examinations.

b. Integrate scientific knowledge and technical skills with effective communication methods to provide quality care and useful diagnostic information.
1. Students practice effective oral communication skills.
2. Students practice effective written communication skills.

Employ critical thinking.
1. Students analyze sonographic principles and apply the information.
2. Students demonstrate competence in the performance of diagnostic medical sonography procedures.

Assessment Procedures
Survey of graduates
Survey of employers
Monitoring of certification examinations

Program Requirements

General Education
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.

Area Requirements

DMS Requirements 39

DMS 400 — Introduction to Sonography 1
DMS 402A — Scanning Techniques I 1
DMS 408 — Sonographic Sectional Anatomy 2
DMS 410 — Abdominal Sonography 2
DMS 412A — 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 — Sonography Internship IV 3
*DMS 499C — Senior Seminar in Sonography 3

Supplemental Requirements 60-62

Choose one of the following groups:

- BIOL 234 — Principles of Human Anatomy and Physiology I, and BIOL 235 — Principles of Human Anatomy and Physiology II, OR
- BIOL 244 — Human Anatomy and Physiology I, BIOL 244A — Human Anatomy and Physiology I Lab, BIOL 245 — Human Anatomy and Physiology II, and BIOL 245A — Human Anatomy and Physiology II Lab

CIS 101 — Computer Literacy 3
IMS/NURS 202 — Medical Terminology 2

Choose 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
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

Course hours included only in general education total.

**For transfer students, refer to Admission Criteria Item E of the Bachelor of Imaging Science section.

Components of Degree Requirements

General Education 36
DMS Area Requirements 39
Supplemental Requirements 60-62

TOTAL PROGRAM REQUIREMENTS 135-137

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 - Area in Leadership in Medical Imaging

The Bachelor of Science Area in 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 programmatic accredited program (radiography, computed tomography, magnetic resonance, diagnostic medical sonography, nuclear medicine or radiation therapy). Non-programmatic accredited programs will be reviewed on an individual basis.

c. Completion of the following 15 credit hours of pre-requisite courses:
   - CIS 101 – Computer Literacy – (three credit hours)
   - COMS 108 – Fundamentals of Speech Communication – (three credit hours)
   - ENG 100 – Writing I – (three credit hours)
   - ENG 200 – Writing II – (three credit hours)
   - MATH 131 or Higher – Mathematical Reasoning and Problem Solving – (three credit hours)

d. Have a cumulative GPA of 2.5 on all coursework for admission to the degree program.

e. Registered and in good standing by a 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**

Applications will be accepted beginning in January for the fall semester and must be received by the fourth Monday in March. Applications will be accepted beginning in August for the spring semester and must be received by the fourth Monday in October. Late applications may be considered until the class if 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 website located at www.moreheadstate.edu/registrar.

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 healthcare regulations into 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.

**Program Requirements**

**General Education**

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

**Area Requirements**

**LMI 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 and Comm. Systems

IMS 361 — Leadership for the Healthcare Professional

IMS 401 — Health Care Law and Policy

IMS 421 — Prog. Planning, Evaluation and 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

**Supplemental Requirements**

CIS 101 — Computer Literacy

Choose one of the following:

*RSCI 375, IMS 376, IMS 378, or IMS 379 — Imaging Discipline for Transfers OR

RSCI 110 — Introduction to Radiologic Sciences

RSCI 200 — Patient Care

RSCI 206 — Radiographic Anatomy, Positioning and Imaging Production I

RSCI 210 — Radiographic Equipment and Imaging I

RSCI 230 — Radiography Clinical Internship I

RSCI 300 — Film Critique and Evaluation

RSCI 310 — Radiographic Anatomy, Positioning and Imaging Production II

RSCI 320 — Radiography Clinical Internship II

RSCI 330 — Imaging Pathology

162  College of Science and Technology
The Department of Nursing Student Handbook is reviewed and revised annually. There may be policy or curriculum changes in the student handbook that differ from those in the undergraduate catalog. In those cases, the student handbook supersedes information in the catalog.

It is the student’s responsibility to read the University Undergraduate Catalog, the Department of Nursing Student Handbook and the official notices. It is the student’s responsibility to abide by the regulations of the University and the guidelines and policies set forth in the Department of Nursing Student Handbook.

**Associate of Applied Science in Nursing**

Center for Health, Education and Research (CHER) Suite 201
Office: 606-783-2438
Fax: 606-783-9123 (Morehead campus)
Fax: 606-783-9544 (Mt. Sterling campus, Clay Center)

**Associate of Applied Science**

The Associate Degree in Nursing (ADNP) is a program of study leading to an Associate of Applied Science (AAS) degree in nursing. The program combines general education studies and support courses 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 AAS in Nursing is accredited by the Accreditation Commission for Education in Nursing, Inc., formerly the National League for Nursing Accrediting Commission Inc., 3343 Peachtree Rd. NE, Suite 850, Atlanta, GA 30326, phone 404-975-5000, fax 404-975-5020.

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 campuses. The ADNP is a face-to-face program utilizing interactive television (ITV), primarily lecturing from the Morehead campus. The ADNP is not an online program and classroom attendance is expected.

**Program Competencies**

The Associate of Applied Science in Nursing graduate will:

1. Compare and contrast the roles of the Registered Nurse into nursing practice 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 concepts of effective management of client care through prioritization, collaboration, coordination, delegation, and effective utilization of resources in dynamic healthcare systems while maintaining a spirit of inquiry.

**Components of Degree Requirements**

<table>
<thead>
<tr>
<th>General Education</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMI Area Requirements</td>
<td>33</td>
</tr>
<tr>
<td>Supplemental Requirements</td>
<td>52</td>
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<tr>
<td><strong>TOTAL PROGRAM REQUIREMENTS</strong></td>
<td><strong>121</strong></td>
</tr>
</tbody>
</table>

**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.

- COMS 290 — Conflict and Communication 3
- IMS 300 — Ethical and Legal Issues in Healthcare 3
- IMS 302 — Hlth Mainten. Throughout the Life Span 3
- MATH 353 — Statistics 3
- MNGT 201 — Principles of Management 3
- SOC 354 — The Individual and Society 3

**Department of Nursing**

Lynn C. Parsons, Chair
Center for Health, Education and Research (CHER) Suite 201
Office: 606-783-2642
Fax: 606-783-9104

**Department and BSN Program**

Michele Whitley 606-783-2296/ Fax 606-783-9104

**Associate Degree Program**

Amanda R. Jewell 606-783-2438
Fax 606-783-9123 (Morehead campus)/Fax 606-783-9544 (MSU at Mt. Sterling - Clay Community Center)

**Nursing Faculty**


**Department of Nursing Student Handbook**

The Department of Nursing Student Handbook is a supplement to the Morehead State University Undergraduate Catalog. The student handbook contains policies and guidelines related specifically to Morehead State University’s Department of Nursing.
6. Appraise 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, evaluation of clinical and campus lab experiences 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 must successfully complete the HESI RN Exit Exam with a minimum score of 850 in order to meet course requirements for NURA 209: Nursing IV. Following graduation, each student must complete the NCLEX-RN to gain licensure as a registered nurse.

Standardized Testing Policy (ADNP)

Purpose:
To outline standardized testing requirements in the Associate Degree Nursing Program (ADNP) curriculum for individuals enrolled in the ADNP.

Requirements:
Health Education Systems Incorporated (HESI) examinations are nationally standardized examinations that are content-specific and based on the National Council of State Boards of Nursing (NCSBN) Testing Blueprint. HESI’s online exams test students on their skills in clinical application and critical thinking which are cornerstones of ADNP student preparation. HESI provides institutional and student diagnostic reports that include an item-by-item topic comparison between Morehead State University’s ADNP group’s percentage answered correctly and the national group norm answered correctly. Additionally, HESI provides an individualized detailed remediation plan for the students regarding their specific areas of weakness.

Scoring of the HESI examination:
The scores range from 0 to over 1,000, and can be as high as 1,500 (depending on the difficulty level of the exam). An acceptable level of performance is 850. However, the recommended level of performance is 900 and above for all scores provided. Each school is responsible for establishing their specific standards related to outcome measures of acceptable scores. Many schools choose a certain overall score as a benchmark for progression, and such benchmarks are set at the discretion of the school’s faculty and administrators. However, when preparing for the NCLEX-RN, it is recommended that students seriously remediate any subject area category in which they obtained a score of less than 850. All test items are weighted according to their difficulty level. Each individual student score reflects application of the HESI Predictability Model (HPM) to the overall score and each subject area score. Research studies have found the HPM to be highly accurate in predicting NCLEX-RN success.
<table>
<thead>
<tr>
<th>Course</th>
<th>HESI Exam Utilized</th>
<th>How HESI Exam is Utilized</th>
<th>Requirement for Remediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURA 103</td>
<td>• Admission Assessment</td>
<td>• Advising Tool • Final exam grade based upon conversion percentage score</td>
<td>• No remediation. • Any student scoring less than the National ADN mean score on the exam</td>
</tr>
<tr>
<td></td>
<td>• Fundamentals</td>
<td></td>
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<tr>
<td></td>
<td>• Custom 107 Adult/Pediatrics Medical Surgical</td>
<td>• Exam grade based upon conversion percentage score • Exam grade based upon conversion percentage score</td>
<td>• Any student scoring less than 850 on the exam • Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td></td>
<td>• Maternity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURA 111</td>
<td>• Fundamentals</td>
<td>• Exam grade based upon conversion percentage score • Exam grade based upon conversion percentage score</td>
<td>• Any student scoring less than the National ADN mean score on the exam. Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td></td>
<td>• Custom 107 Adult/Pediatric Medical Surgical</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Maternity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURA 201</td>
<td>• Custom 201 Adult/Pediatric chronic health conditions</td>
<td>• Exam grade based upon conversion percentage score • Exam grade based upon conversion percentage score</td>
<td>• Any student scoring less than 850 on the exam • Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td></td>
<td>• Psychiatric Mental Health</td>
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</tr>
<tr>
<td>NURA 208</td>
<td>• No HESI exams administered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURA 209</td>
<td>• RN Exit Exam (administered at mid-term and final week of classes)</td>
<td>• Exam grade based upon conversion percentage score.</td>
<td>• Any student scoring less than 850 on the exam • Any student scoring less than 850 on the exam</td>
</tr>
</tbody>
</table>

In regard to remediation, following the completion of any HESI standardized examination; students who have not successfully met the course guidelines for the exam are required to be accountable for their remediation by accessing their individual HESI remediation plan via the Evolve website within two weeks of the availability of the exam score. Students that progress to the subsequent nursing course will meet prior to the first exam of the beginning of the following semester with assigned faculty. Students are recommended to contact and schedule a remediation meeting to document action toward their remediation plan based upon the students' individual, identified deficiencies of the specific HESI exam. The Evolve remediation should be completed prior to attendance at the remediation meeting. Failure to schedule a meeting or complete a plan of remediation may negatively impact the student’s success in courses throughout the ADNP curriculum, success on the HESI course requirement housed within NURA 209 in the final semester of the ADNP, as well as success on the NCLEX-RN (licensure exam).

Note: Policy Subject to Change
7/13/12 ADNP Faculty

Fees and Expenses
There are fees and expenses specific to the Department of Nursing in addition to those required by the University. These fees are subject to change without prior notification. See the University Undergraduate Catalog for general university fees and expenses.
AAS in Nursing Admission Requirements and Procedures

ADNP Application Procedure
1. Be unconditionally admitted to MSU.
2. Submit a completed application packet to the ADNP. Completed application 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:
      1. University undergraduate catalog(s) if transfer credit is sought;
      2. Syllabi for nursing course(s) to be evaluated for transfer credit; and
      3. Letter of recommendation from the director/coordinate 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

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
Department of Nursing
Morehead State University
Center for Health, Education and Research (CHER) Suite 201
Morehead, KY 40351

ADNP Admission Criteria
The AAS in Nursing program has a limited enrollment on the Morehead and Mt. Sterling campuses. The following criteria are used to determine conditional acceptance to the program for ADNP and Paramedic-ADNP applicants:
1. American College Test (Enhanced ACT) Score with a mandatory minimum composite score of 20 or higher.
2. Applicants must meet the following:
   a. A minimum GPA of 3.0 or higher on a scale of 4.0 with a minimum grade of "C" in prerequisite courses or transfer equivalent for ENG 100, MATH core, BIOL 234 and BIOL 238.
   b. Maintain a minimum grade of "C" in all courses required for the ADNP. Applicants with a grade of less than "C" on two courses required for the program 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 ADNP 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 ADNP. 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.

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 include CPR, immunizations, professional malpractice insurance, criminal background check, drug testing, academic materials, testing fees, clothing and equipment.

Prerequisite courses required prior to admission.
BIOL 234 — Principles of Human Anatomy and Physiology I, and BIOL 235 — Principles of Human Anatomy and Physiology II, OR
BIOL 244/244A — Human Anatomy and Physiology I/Lab and BIOL 245/245A — Human Anatomy and Physiology II/Lab
ENG 100 — Writing I
Math Core (MATH 135 is recommended)

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.
ADNP-Paramedic Track Admission Criteria

The AAS in Nursing Program has a limited enrollment on the Morehead and Mt. Sterling campuses. The following criteria are used to determine conditional acceptance to the program for ADNP and ADNP Paramedic Track applicants: American College Test (Enhanced ACT) Score with a mandatory minimum composite score of 20 or higher.

1. Applicants must have the following:
   a. Paramedic Track Applicants must have a GPA of 3.0 or higher on a scale of 4.0 with a minimum grade of "C" in prerequisite courses required for the AAS in Nursing.
   b. Applicants with a grade less than "C" on two courses required for the program within the last two years are not eligible for admission.
   c. Paramedic Track Applicants must have a minimum cumulative GPA of 2.0 on all work at the University.
   d. Paramedic Track Applicants may be conditionally admitted to the program pending successful completion of prerequisite courses required for admission to the program.
   e. Paramedic Track 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 Track applicants must successfully complete (with a minimum grade of "C") all other prerequisite courses prior to completion of the Paramedic-ADN Transition course, NURA 111.
   g. Paramedic Track applicants must seek admission into the ADNP Paramedic Track program within one year after completion of NURA 111, Paramedic-ADN in Nursing Transition, with a grade of "C" of higher.

2. Final acceptance will be dependent on maintaining course grades and GPA as well as meeting CPR and health requirements by established dates. Compliance with the Technical Performance Standards is also required.

3. Clinical education is a mandatory component of the ADNP. 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 or corequisite courses to be taken before or concurrently with NURA111: Paramedic-ADN Transition

BIOL 217 & 217L — Elem. Medical Microbiology 4

Notes: All ADNP and ADNP Paramedic Track 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. 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 include CPR, immunizations, professional malpractice insurance, criminal background check, drug testing, academic materials, testing fees, clothing and equipment.

AAS in Nursing Degree Requirements

Program Requirements

General Education

FYS 101 — First Year Seminar 3
ENG 100 — Writing I 3
ENG 200 — Writing II 3
COMS 108 — Fundamentals of Speech Communication 3
MATH Core (MATH 135 recommended) 3

General Education Total 15

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

AAS Requirements

Nursing Requirements 34

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

Supplemental Requirements 16-18

BIOL 217/BIOI 217L — Elementary Medical Biology 4
BIOL 234 — Principles of Human Anatomy and Physiology I, and BIOL 235 — Principles of Human Anatomy and Physiology II OR
BIOL 244/244A — Human Anatomy and Physiology I/II/Lab and BIOL 245/245A — Human Anatomy and Physiology II/Lab

Humanities Elective 3
Psy 154 — Introduction to Psychology 3
Components of Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>General Education</td>
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<tr>
<td>Nursing Requirements</td>
<td>34</td>
</tr>
<tr>
<td>Supplemental Requirements</td>
<td>16-18</td>
</tr>
<tr>
<td><strong>TOTAL PROGRAM REQUIREMENTS</strong></td>
<td>65-67</td>
</tr>
</tbody>
</table>

**Required Course Sequence for ADNP Students**

A minimum 65 credit hours is required for the AAS degree, which includes 31-33 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 ADNP. The ADNP 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 Admission**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 234 — Principles of Human Anatomy and Physiology I, and BIOL 235 — Principles of Human Anatomy and Physiology II, OR</td>
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</tr>
<tr>
<td>BIOL 244/244A — Human Anatomy and Physiology I/Lab and BIOL 245/245A — Human Anatomy and Physiology II/Lab</td>
<td></td>
</tr>
<tr>
<td>ENG 100 — Writing I</td>
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<tr>
<td>MATH 135 — Mathematics for Technical Students (131, 152, 174, 175 or equivalent)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>NURA 103 — Nursing I</td>
<td>6</td>
</tr>
<tr>
<td>ENG 200 — Writing II</td>
<td>3</td>
</tr>
<tr>
<td>FYS 101 — First Year Seminar</td>
<td>3</td>
</tr>
<tr>
<td>PSY 154 — Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
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</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURA 107 — Nursing II</td>
<td>8</td>
</tr>
<tr>
<td>BIOL 217/BIOI 217L</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURA 201 — Nursing III</td>
<td>8</td>
</tr>
<tr>
<td>COMM 108/COMS 108 — Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURA 208 — Transition to Practice</td>
<td>2</td>
</tr>
<tr>
<td>NURA 209 — Nursing IV</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
</tr>
</tbody>
</table>

| **Total Program Requirements** | 65-67   |

**AAS in Nursing - Paramedic Track Degree Requirements**

**Program Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td></td>
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<tr>
<td>FYS 101 — First Year Seminar</td>
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<tr>
<td><strong>Total</strong></td>
<td></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>COMS 108 — Fundamentals of Speech Comm</td>
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</tr>
<tr>
<td>Humanities Elective</td>
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<tr>
<td><strong>Semester Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NURA 111 — Paramedic/ADN Transition Course</td>
<td>6</td>
</tr>
<tr>
<td>NURA 201 — Nursing III</td>
<td>8</td>
</tr>
<tr>
<td>NURA 208 — Transition to Practice</td>
<td>2</td>
</tr>
<tr>
<td>NURA 209 — Nursing IV</td>
<td>10</td>
</tr>
<tr>
<td>14 hours &quot;K&quot; credit with successful completion of NURA 111 and admission to the AAS in Nursing program.</td>
<td>14 K</td>
</tr>
<tr>
<td><strong>Supplemental Requirements</strong></td>
<td>16-18</td>
</tr>
<tr>
<td>BIOL 217/BIOI 217L — Elementary Medical Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 234 — Principles of Human Anatomy and Physiology I, and BIOL 235 — Principles of Human Anatomy and Physiology II, OR</td>
<td>6-8</td>
</tr>
<tr>
<td>BIOL 244/244A — Human Anatomy and Physiology I/Lab and BIOL 245/245A — Human Anatomy and Physiology II/Lab</td>
<td></td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>PSY 154 — Introduction to Psychology</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>71-73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NURA 201 — Nursing III</td>
<td>8</td>
</tr>
<tr>
<td>COMS 108 — Fundamentals of Speech Comm</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Semester Total</strong></td>
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</tbody>
</table>

**Required Curriculum Sequence for ADNP-Paramedic Track Students Prior to Admission**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURA 111 — Paramedic/ADN Transition Course</td>
<td>6</td>
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<tr>
<td>NURA 201 — Nursing III</td>
<td>8</td>
</tr>
<tr>
<td>NURA 208 — Transition to Practice</td>
<td>2</td>
</tr>
<tr>
<td>NURA 209 — Nursing IV</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31-33</td>
</tr>
</tbody>
</table>
Second Semester
NURA 208 — Transition to Practice 2
NURA 209 — Nursing IV 10
Semester Total 12

Total Program Credits 57-59

After official admission to the ADNP Paramedic Track program, students will receive "K" credit for the following nursing courses.

NURA 103 — Nursing I 6
NURA 107 — Nursing II 8
Total 14 "K"

Academic Standards and Progression (ADNP)

Purpose:
To outline for the student, academic standards to be met for progression in the Associate Degree Nursing Program.

Standards for Progression:
The following academic standards are required for student progression in the Associate Degree Nursing Program:
The student will:
1. Complete each required course in the curriculum with a minimum grade of "C."
2. Achieve a "C" or higher grade in nursing and general education/support courses which are required at each semester level prior to progressing to subsequent nursing courses.
3. Achieve a satisfactory in clinical for nursing courses with a clinical component.
4. Maintain a minimum cumulative GPA of 2.0 on all work at the University.
5. Cease to attend clinical immediately upon receiving two "Us" at any time during a clinical rotation.
6. Repeat both theory and clinical components of a nursing course in which less than a "C" grade is achieved; or when the clinical component is evaluated as unsatisfactory.
7. Repeat required general education/support courses in which less than a "C" grade is achieved prior to progressing to the next nursing course.
8. If a course repeat is required, the student must submit a written request at the time of course failure to the coordinator of the ADN Program stating the desire to repeat the course. If a written statement is not received it will be considered an unofficial withdrawal from the program.
9. NURA 208 and NURA 209 are required to be taken consecutively during the final semester of the program to meet KBN requirements for the 120 hour direct patient care experience during the last semester of the program. In the event that a student is unsuccessful in NURA 208, NURA 209 must be repeated regardless of previous successful grade earned to fulfill 201 KAR 20:320. A student who is unsuccessful in NURA 208 and NURA 209 will be dismissed from the program.
10. For consideration for reinstatement in the nursing program the student may be required to complete an interview with the Admissions and Progression Committee.
11. Be reinstated in the nursing program providing:
   a. Space is available in the nursing class.
   b. Recommendation for reinstatement was made by the Admissions and Progression Committee.
   c. Submission of written request for reinstatement was made.
   d. Required general education/support courses were successfully completed.
   e. Course failures have not exceeded the limits as stated below. (See #16)
12. Complete the nursing program within six semesters after initial entry into the program.
13. Transfer students who enter the program in the second semester of required courses must complete the program within five semesters. Transfer student who enter the program in the third semester of required courses must complete the program within four semesters.
15. Present evidence of current liability insurance coverage payment before progressing into a clinical nursing course that requires learning activities within a healthcare facility.
16. Be dismissed from the nursing program for any of the following situations after admission to the nursing program:
   a. Achievement of less than a "C" grade twice in the same course.
   b. Achievement of less than a "C" in any two required courses in the curricular sequence.
   c. Inability to complete the nursing program within six semesters after beginning the program.
   d. Inability for transfer or Paramedic to ADN students who have entered the program at the third semester to complete within four semesters.
   e. Inability to transfer theory into practice.
   f. Consistent lack of understanding of his/her limitations.
   g. Inability to anticipate the consequences of action or lack of action.
   h. Consistent failure to maintain communication with faculty and staff about client care.
   i. Dishonesty about client care.
   j. Commitment of a civil/criminal act in the educational area.
   k. Breach of patient confidentiality.
   l. Impaired behavior.
   m. Unprofessional behavior or acts of incivility that place a client or colleague in physical or emotional jeopardy.
Examples of incivility include but are not limited:
- using the "silent treatment"
- spreading rumors
- badgering or back-stabbing
- rude or obnoxious behavior
- sabotaging a project
- damaging someone's reputation
- using humiliation, put-downs, and intimidation
- failing to support a peer in collaborative relationships
- setting someone up for failure
- undermining of work
- verbal abuse
- public reprimands
- sarcasm
- destroying confidence
- losing one's temper or yelling at someone
- continual criticism
- encouraging others to turn against a peer.

n. Failure of acceptance to a clinical site based on unprofessional behavior.

Bachelor of Science in Nursing

Center for Health, Education and Research (CHER) Suite 201
Office: 606-783-2296
Fax: 606-783-9104

The Bachelor of Science in Nursing (BSN) 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 (NCLEX-RN). Students complete standardized testing at the completion of selected courses within the curriculum to evaluate specific outcomes. See Standardized Testing Policies located in the Department of Nursing Student Handbook and undergraduate catalog for details regarding the administration of standardized exams across the Pre-Licensure Baccalaureate Nursing Program (BNP) curriculum and Post-Licensure (RN-BSN) curriculum.

Pre-licensure Baccalaureate Nursing program students must successfully complete the HESI RN Exit Exam with a minimum score of 850 in order to meet course requirements for NURB 499C: Advanced Nursing Practicum. Following graduation, each prelicensure student must complete the NCLEX-RN to gain licensure as a registered nurse.

Additional assessment procedures include baccalaureate nursing program surveys of graduates and employers.

Fees and Expenses

There are fees and expenses specific to the Department of Nursing in addition to those required by the University. These fees are subject to change without prior notification. See the Undergraduate Catalog for general university fees and expenses.

BNP Prelicensure Admission Requirements and Procedures

The BNP 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.

BNP Prelicensure 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:
   1. University undergraduate catalog(s) if transfer credit is sought;
   2. Syllabi for nursing course(s) to be evaluated for transfer credit; and
   3. Written letter of recommendation from the director/coordinator of the nursing program from which the student is transferring.
f. Copy of midterm grades for spring semester if applicable.
4. Student selection process occurs during the spring semester preceding fall admission.
5. Students transferring from other nursing programs must follow the same admission procedure and meet the same criteria for admission. The student who has completed nursing courses in another program may be eligible for advanced placement. For consideration of placement into a spring semester of the curriculum sequence, application materials must be submitted by Sept. 1 of the preceding semester.
6. Students are officially admitted to the BNP in the fall semester of the sophomore year of the curriculum sequence.
7. To be considered for official admission to the BNP, all materials must be submitted to the address below before March 15 preceding fall admission to the program:

**Academic Counseling Coordinator**
Baccalaureate Nursing Program
Department of Nursing
Morehead State University
Center for Health, Education and Research (CHER) Suite 201
Morehead, KY 40351

Information related to required tuition and fees may be obtained from Morehead State University, Office of Enrollment Services.

**BNP Prelicensure Admission Criteria**
The BNP 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. Applicants to the BNP are selected based upon the following criteria:
1. Completion of the 31-33 credit hours of the required pre-nursing courses:
   - BIOL 234 — Principles of Human Anatomy and Physiology I or BIOL 244/244A — Human Anatomy and Physiology I/ Lab (three to four-credit hours with approval this course may be used to satisfy NSC I)
   - ENG 100 — Writing I (three credit hours)
   - MATH Core (MATH 135 is recommended, three credit hours)
   - FYS 101 — First Year Seminar (three credit hours)
   - PSY 154 — (three credit hours)
   - BIOL 235 — Principles of Human Anatomy and Physiology II or BIOL 245/245A — Human Anatomy and Physiology II/Lab (three to four credit hours)
   - COMS 108 — Fundamentals of Speech Communication (three credit hours)
   - ENG 200 — Writing II (three credit hours)
   - CHEM 101/101L — Survey of Chemistry (four credit hours, NSC II exchange)
   - SOC 203 — Contemporary Social Problems (three credit hours)
2. Submission of American College Test (ACT) score with a mandatory minimum composite of 20 or higher.
3. A GPA of 3.0 or above (with no rounding) based on the required 31-33 credits with no grade being less than a “C.”
4. A minimum GPA of 2.5 or above for one of the following:
   a. BIOL 234 — Principles of Human Anatomy and Physiology I, BIOL 235 — Principles of Human Anatomy and Physiology II, and MATH 135: — Math for Technical Students (or the equivalent), or
   b. BIOL 244/244A — Human Anatomy and Physiology I & Lab, BIOL 245/245A — Human Anatomy and Physiology II & Lab, and MATH 135: — Math for Technical Students (or the equivalent).
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 16 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.
10. Documentation of criminal background check.
11. Documentation of drug testing (dates scheduled by program).
12. Final acceptance to the program will be dependent on maintaining course grades and grade point average, as well as meeting CPR, health and drug testing requirements by established dates.

**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 (including weekends), evening and night.

3. Students have the responsibility for the costs incurred by enrollment in the nursing program. These costs include CPR, immunizations, professional malpractice insurance, criminal background check, drug testing, academic materials, testing fees, clothing and equipment.

4. Clinical education is a mandatory component of the BNP. 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 of clinical assignment. The student is responsible for any incurred cost. Any student who fails acceptance to acceptance of clinical assignment. The student is responsible for the costs incurred by enrollment in the nursing program. These costs include CPR, immunizations, professional malpractice insurance, criminal background check, drug testing, academic materials, testing fees, clothing and equipment.

5. Maintain compliance with immunization requirements.

6. Repeat required nursing course general education/support courses in which less than a "C" grade is achieved prior to progressing to the next nursing course.

7. Maintain 2.0 total cumulative GPA in order to continue in nursing program.

8. Complete the nursing program within five years after official acceptance into the program.

9. For the post licensure component, complete all required semester one and two nursing and general education courses prior to enrolling in NURB 461: Nursing Leadership and Management, NURB 498: Nursing Senior Seminar, and NURB 499C: Advanced Nursing Practicum.

10. Maintain compliance with immunization requirements.


12. Present evidence of having current certification in basic cardiopulmonary resuscitation (CPR) for health care providers by the American Heart Association before progressing to a clinical nursing course that requires patient/student interaction.

13. Present evidence of current liability insurance coverage payment before progressing into a clinical nursing course that requires learning activities within a healthcare facility.

14. Present evidence of professional treatment prior to registering for subsequent nursing courses in the event that there is evidence of emotional instability or drug or alcohol abuse which could affect the ability to provide safe nursing care (Please refer to the Department of Nursing Drug Screening Policy located within the student handbook for further details).

15. Adhere to the following guidelines with respect to deficiencies:

   a. In the event of having to repeat a nursing course or required support course, the student must submit a written request at the time of course failure to the Coordinator of the Baccalaureate Nursing program stating the desire to repeat the course. This statement must be received no later than one week after the registrar’s office has released the grades to the student’s Datatel Account. If a written statement is not received it will be considered an unofficial withdrawal from the program. (See Resumption of Program Policy for details regarding statement.)

   b. All courses repeated due to failure to achieve a course grade of "C" or above will be counted in determining the number of course failures.

16. Be dismissed from the nursing program for any of the following situations after admission to the nursing program:

   a. Achievement of less than a "C" grade twice in the same course.

   b. Achievement of less than a "C" in any two required courses in the program curricular sequence.

   c. Inability to complete the nursing program within five years after beginning the program.

   d. Placing a patient in extreme emotional or physical jeopardy.

17. The Department of Nursing and the BNP expects students to conduct themselves in a professional manner that is in accordance with the Code of Ethics for Nursing. The Code of Ethics for Nurses serves as a guide for carrying out nursing responsibilities in a manner consistent with quality in nursing care and the ethical obligations of the profession. A student demonstrating any of the following will be dismissed from the program prior to the end of the semester:

   a. Inability to transfer theory into practice.

   b. Consistent lack of understanding of his/her limitations.

   c. Inability to anticipate the consequences of action or lack of action.

   d. Consistent failure to maintain communication with faculty and staff about client care.
e. Dishonesty about client care.
f. Commitment of a civil/criminal act in the educational area.
g. Breach of patient confidentiality.
h. Impaired behavior.
i. Unprofessional behavior or acts of incivility that place a client or colleague in physical or emotional jeopardy.

Examples of incivility include but are not limited:
- using the "silent treatment"
- spreading rumors
- badgering or back-stabbing
- rude or obnoxious behavior
- sabotaging a project
- damaging someone’s reputation
- using humiliation, put-downs, and intimidation
- failing to support a peer in collaborative relationships
- setting someone up for failure
- undermining of work
- verbal abuse
- public reprimands
- sarcasm
- destroying confidence
- losing one’s temper or yelling at someone
- continual criticism
- encouraging others to turn against a peer.

j. Failure of acceptance to a clinical site based on denial of the clinical placement due to failure to comply with all hospital policies and procedures.
k. Failure of acceptance to a clinical site based on unprofessional behavior.

18. Students who perform below the national average on any nationally normed achievement examination are required to meet with the course leader and the program coordinator to develop a retention plan. Retention plan must be developed, initiated, and completed prior to progressing to the next nursing course.

Standardized Testing Policy (BNP)

Purpose:
To outline standardized testing requirements in the Baccalaureate Nursing Program curriculum for individuals enrolled in the Prelicensure Baccalaureate Nursing Program.

Requirements:
Health Education Systems Incorporated (HESI) examinations are nationally standardized examinations that are content-specific and based on the National Council of State Boards of Nursing (NCSBN) Testing Blueprint. HESI’s online exams test students on their skills in clinical application and critical thinking which are cornerstones of BSN student preparation. HESI provides institutional and student diagnostic reports that include an item-by-item topic comparison between Morehead State University’s BSN group’s percentage answered correctly and the national group norm answered correctly. Additionally, HESI provides an individualized detailed remediation plan for the students regarding their specific areas of weakness.

HESI exams are used throughout the curriculum within MSU’s BNP from admission through the capstone course. The rationale for utilizing the HESI series of examinations is to prepare the student for eventual NCLEX-RN (“Boards”) success. The individual exams offered throughout the curriculum are provided as stepping stones which culminate in taking the HESI Exit Exam, which is a course requirement in the NURB 499C Advanced Nursing Practicum capstone course. Therefore, preparation, completion, and remediation as indicated on all of the HESI exams, are essential elements throughout the curriculum, and are performed in order to prepare the student for success.

Specifically, HESI exams are utilized in the following courses: NURB 262 Foundational Skills for Professional Nursing, NURB 264 Family Health Nursing, NURB 320 Care of Older Adults, NURB 322 Mental Health Nursing, NURB 324 Acute Alterations in Adult Health I, NURB 420 Acute Alterations in Adult Health II, NURB 422 Chronic Alterations in Health, NURB 461 Nursing Leadership, NURB 498 Nursing Senior Seminar, and NURB 499C Advanced Nursing Practicum.
<table>
<thead>
<tr>
<th>Course</th>
<th>HESI Exam Utilized</th>
<th>How HESI Exam is Utilized</th>
<th>Requirement for Remediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURB 262</td>
<td>• Admission HESI</td>
<td>• Remediation/Advising Tool</td>
<td>• Any student scoring 76 percent or below in any content area.</td>
</tr>
<tr>
<td></td>
<td>• Fundamental</td>
<td>• Final exam grade based upon conversion percentage score</td>
<td>• Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 264</td>
<td>Pes/OB</td>
<td>Final exam grade based upon conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 320</td>
<td>Custom Mid-curricular</td>
<td>Final exam grade based upon conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 322</td>
<td>Mental Health Nursing</td>
<td>Final exam grade based upon conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 324</td>
<td>Custom Adult Med-Surg</td>
<td>Final exam grade based upon conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 420</td>
<td>Comprehensive Med-Surg</td>
<td>Final exam grade based upon conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 422</td>
<td>Custom Chronic</td>
<td>Final exam grade based upon conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 461</td>
<td>Leadership/Management</td>
<td>Final exam grade based upon conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 498</td>
<td>Pharmacology</td>
<td>An exam grade based upon the conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 499C</td>
<td>Exit Exam</td>
<td>A course requirement of the following: HESI score of 850. The HESI Exit will be administered approximately during Week six of the semester. If necessary, a second exam may be administered at student cost prior to exit from the course. The second exam will be scheduled approximately six (6) weeks following the first attempt or in Week 12 of the semester. If the student is not successful on the second attempt, a third exam will be scheduled approximately during Week 16, so as not to be in conflict with Finals Week. If the student is not successful on the third attempt, an &quot;E&quot; is assigned to the course, regardless of other earned scores in the course. The conversion percentage score attained on the first attempt of the Exit Exam will be utilized as a course exam grade, as well.</td>
<td>Any student scoring less than 850 on any attempt at the exam</td>
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</table>

In regard to remediation, following the completion of any HESI standardized examination, students who have not successfully met the course guidelines for the exam are required to be accountable for their remediation by accessing their individual HESI remediation plan via the Evolve website within two weeks of the availability of the exam score. Within two weeks of the beginning of the following semester, students are required to contact and schedule a remediation meeting with the course leader/designee of the course, in which the HESI was housed. A proposed remediation plan of action, based upon the students’ individual, identified deficiencies of the specific HESI exam should be completed prior to attendance at the remediation meeting. Failure to schedule a meeting or complete a plan of remediation may negatively impact the students’ success in courses throughout the BNP curriculum, success on the HESI course requirement housed within NURB 499C in the final semester of the BNP, as well as success on the NCLEX-RN (licensure exam).

In regard to scoring of the HESI examination, the scores range from 0 to over 1,000, and can be as high as 1,500 (depending on the difficulty level of the exam). An acceptable level of performance is 850. However, the recommended level of performance is 900 and above for all scores provided. Each school is responsible for establishing their specific standards related to outcome measures of acceptable scores. Many schools choose a certain overall score as a benchmark for progression, and such benchmarks are set at the discretion of the school’s faculty and administrators. However, when preparing for the NCLEX®, it is recommended that students seriously remediate any subject area category in which they obtained a score of less than 850. All test items are weighted according to their difficulty level. Each individual student score reflects application of the HESI Predictability Model (HPM) to the overall score and each subject area score. Research studies have found the HPM to be highly accurate in predicting NCLEX® success. The conversion score is a weighted percentage score that considers the average difficulty of the exam and the average difficulty of the test items answered. The HESI score is a better predictor of NCLEX® success than the conversion score because it reflects application of the HPM in its calculation, whereas the conversion score does not. Note: Policy subject to change. 6/26/12 BNP Faculty
Bachelor of Science in Nursing - BNP Prelicensure

BNP policies on challenge examination, criteria for taking challenge exams and transfer credit can be obtained from the Department of Nursing.

Program Requirements

General Education
CHEM 101/CHEM 101L — Survey of Chemistry (NSC II) 4
NURB 499C — Advanced Nursing Practicum 3

General Education Total 37
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.

BNP Requirements

Prelicensure Requirements 61
NURB 260 — Wellness and Health Promotion 2
NURB 262 — Foundational Skills for Professional Nursing 6
NURB 264 — Family Health Nursing 6
NURB 266 — Community-Based Nursing Care 5
NURB 320 — Care of Older Adults 5
NURB 322 — Mental Health Nursing 4
NURB 324 — Acute Alterations in Adult Health I 7
NURB 326 — Advanced Health Assessment 2
NURB 361 — Introduction to Nursing Research 3
NURB 420 — Acute Alterations in Adult Health II 7
NURB 422 — Chronic Alterations in Health 5
NURB 424 — Public Health 3
NURB 461 — Nursing Leadership and Management 3
NURB 498 — Nursing Senior Seminar 3

Supplemental Requirements 26-28
BIOL 217/BIOL 217L — Elementary Medical Biology 4
BIOL 234 — Principles of Human Anatomy and Physiology I, and BIOL 235 — Principles of Human Anatomy and Physiology II, or BIOL 244/244A — Human Anatomy and Physiology I/Lab and BIOL 245/245A — Human Anatomy and Physiology II/Lab 6-8
BIOL 336 — Pathophysiology 4
MATH 353 — Statistics 3
NURS 345 — Global Health 3
NURS Elective 3
PSY 156 — Lifespan Developmental Psychology 3

Components of Degree Requirements

General Education 37
BNP Requirements 61
Supplemental Requirements 26-28

TOTAL PROGRAM REQUIREMENTS 124-126

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.

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.

BNP Postlicensure (RN-BSN) Admission Requirements and Procedures

BNP Post Licensure 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 the last Friday in March for admission into the fall semester or the last Friday in October 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:
      1. University undergraduate catalog(s) if transfer credit is sought;
      2. Syllabi for nursing course(s) to be evaluated for transfer credit; and
      3. 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.

BNP Post Licensure 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 45 credit hours of prescribed general education and support courses required for a bachelor's degree in nursing.
5. Have a minimum cumulative GPA of 2.5 on all coursework required for admission to the post licensure (RN-BSN) 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. Documentation of current American Heart Association (AHA) cardiopulmonary resuscitation (CPR) in Basic Life Support for Healthcare Providers certification.
8. Documentation of compliance with all health requirements.
10. Documentation of current professional malpractice insurance.
11. Documentation of a criminal background check.

Conditions for Post Licensure Enrollment
1. Students have the responsibility for the costs incurred by enrollment in the nursing program. These costs include CPR, immunizations, professional malpractice insurance, criminal background check(s), drug testing, academic materials, testing fees, clothing and equipment.
2. Clinical education is a mandatory component of the BNP. 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 of clinical assignment. The student is responsible for any incurred cost. Any student who fails acceptance to acceptance of 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.

Academic Standards and Progression (RN-BSN)

Purpose:
To outline for the students, standards to be met for progression in the Baccalaureate Nursing Program.

Standards for Progression:
The following standards are required for student progression in the Baccalaureate Nursing Program:
The student will:
1. Complete each required course in the required curriculum with a minimum grade of "C."
2. Achieve a minimum grade of "C" in nursing, general education, and/or support courses at each semester level prior to progressing to subsequent nursing courses.
3. Achieve a satisfactory in clinical for nursing courses with a clinical component.
4. Cease to attend clinical immediately upon receiving two unsatisfactories ("Us") at any time during a clinical rotation.
5. Repeat both theory and clinical components of a nursing course in which less than a "C" grade is achieved; or when the clinical component is evaluated as unsatisfactory.
6. Repeat required nursing course/general education/support courses in which less than a "C" grade is achieved prior to progressing to the next nursing course.
7. Maintain 2.0 total cumulative GPA in order to continue in nursing program.
8. Complete the nursing program within five years after official acceptance into the program.
9. For the post licensure component, complete all required semester one and two nursing and general education courses prior to enrolling in NURB 461: Nursing Leadership and Management, NURB 498: Nursing Senior Seminar, and NURB 499C: Advanced Nursing Practicum.
10. Maintain compliance with immunization requirements.
12. Present evidence of having current certification in basic cardiopulmonary resuscitation(CPR) for health care providers by the American Heart Association before progressing to a clinical nursing course that requires patient/student interaction.
13. Present evidence of current liability insurance coverage payment before progressing into a clinical nursing course that requires learning activities within a healthcare facility.
14. Present evidence of professional treatment prior to registering for subsequent nursing courses in the event that there is evidence of emotional instability or drug or alcohol abuse which could affect the ability to provide safe nursing care (Please refer to the Department of Nursing Drug Screening Policy located within the student handbook for further details).
15. Adhere to the following guidelines with respect to deficiencies:
   a. In the event of having to repeat a nursing course or required support course, the student must submit a written request at the time of course failure to the coordinator of the baccalaureate nursing program stating the desire to repeat the course. This statement must be received no later than one week after the registrar’s office has released the grades to the student’s Datatel Account. If a written statement is not received it will be considered an unofficial withdrawal from the program. (See Resumption of Program Policy for details regarding statement.)
   b. All courses repeated due to failure to achieve a course grade of "C" or above will be counted in determining the number of course failures.
16. Be dismissed from the nursing program for any of the following situations after admission to the nursing program:
   a. Achievement of less than a "C" grade twice in the same course.
   b. Achievement of less than a "C" in any two required courses in the program curricular sequence.
   c. Inability to complete the nursing program within five years after beginning the program.
   d. Placing a patient in extreme emotional or physical jeopardy.
17. The Department of Nursing and the BNP expects students to conduct themselves in a professional manner that is in accordance with the Code of Ethics for Nursing. The Code of Ethics for Nurses serves as a guide for carrying out nursing responsibilities in a manner consistent with quality in nursing care and the ethical obligations of the profession. A student demonstrating any of the following will be
dismissible from the program prior to the end of the semester:

a. Inability to transfer theory into practice.
b. Consistent lack of understanding of his/her limitations.
c. Inability to anticipate the consequences of action or lack of action.
d. Consistent failure to maintain communication with faculty and staff about client care.
e. Dishonesty about client care.
f. Commitment of a civil/criminal act in the educational area.
g. Breach of patient confidentiality.
h. Impaired behavior.
i. Unprofessional behavior or acts of incivility that place a client or colleague in physical or emotional jeopardy.

Examples of incivility include but are not limited:

- using the "silent treatment"
- spreading rumors
- badgering or back-stabbing
- rude or obnoxious behavior
- sabotaging a project
- damaging someone’s reputation
- using humiliation, put-downs and intimidation
- failing to support a peer in collaborative relationships
- setting someone up for failure
- undermining of work
- verbal abuse
- public reprimands
- sarcasm
- destroying confidence
- losing one’s temper or yelling at someone
- continual criticism
- encouraging others to turn against a peer

j. Failure of acceptance to a clinical site based on denial of the clinical placement due to failure to comply with all hospital policies and regulations.
k. Failure of acceptance to a clinical site based on unprofessional behavior.

18. Students who perform below the national average on any nationally normed achievement examination are required to meet with the course leader and the program coordinator to develop a retention plan. Retention plan must be developed, initiated, and completed prior to progressing to the next nursing course.

**Standardized Testing Policy (RN-BSN)**

**Purpose:**

To outline standardized testing requirements in the Baccalaureate Nursing Program curriculum for individuals enrolled in the Post-Licensure Baccalaureate Nursing Program.

**Requirements:**

Health Education Systems Incorporated (HESI) examinations are nationally standardized examinations that are content-specific and based on the National Council of State Boards of Nursing (NCSBN) Testing Blueprint. HESI’s online exams test students on their skills in clinical application and critical thinking which are cornerstones of BSN student preparation. HESI provides institutional and student diagnostic reports that include an item-by-item topic comparison between Morehead State University’s BSN group’s percentage answered correctly and the national group norm answered correctly. Additionally, HESI provides an individualized detailed remediation plan for the students regarding their specific areas of weakness.

HESI exams are utilized in the following RN-BSN Program courses: NURB 461 Nursing Leadership, NURB 498 Nursing Senior Seminar and NURB 499C Advanced Nursing Practicum.
Use of Standardized Testing in Post-Licensure (RN-BSN) Program Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>HESI Exam Utilized</th>
<th>How HESI Exam is Utilized</th>
<th>Requirement for Remediation</th>
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<tr>
<td>NURB 461</td>
<td>Leadership/Management</td>
<td>Final exam grade based upon conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
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<tr>
<td>NURB 498</td>
<td>RN-Exit</td>
<td>An exam grade based upon the conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
<tr>
<td>NURB 499C</td>
<td>RN-BSN Mobility Exam</td>
<td>An exam grade based upon the conversion percentage score</td>
<td>Any student scoring less than 850 on the exam</td>
</tr>
</tbody>
</table>

In regard to remediation, following the completion of any HESI standardized examination, students who have not successfully met the course guidelines for the exam are required to be accountable for their remediation by accessing their individual HESI remediation plan via the Evolve website within two weeks of the availability of the exam score. Within two weeks of the beginning of the following semester, students are required to contact and schedule a remediation meeting with the course leader/designee of the course, in which the HESI was housed. A proposed remediation plan of action, based upon the students’ individual, identified deficiencies of the specific HESI exam should be completed prior to attendance at the remediation meeting (may occur online/by phone/email as this is an online program). Failure to schedule a meeting or complete a plan of remediation may negatively impact the students’ success in courses throughout the BNP curriculum, success on the HESI course requirement housed within NURB 499C in the final semester of the BNP.

In regard to scoring of the HESI examination, the scores range from 0 to over 1,000, and can be as high as 1,500 (depending on the difficulty level of the exam). An acceptable level of performance is 850. However, the recommended level of performance is 900 and above for all scores provided. Each school is responsible for establishing their specific standards related to outcome measures of acceptable scores. Many schools choose a certain overall score as a benchmark for progression, and such benchmarks are set at the discretion of the school’s faculty and administrators. It is recommended that students seriously remediate any subject area category in which they obtained a score of less than 850. All test items are weighted according to their difficulty level. Each individual student score reflects application of the HESI Predictability Model (HPM) to the overall score and each subject area score. The conversion score is a weighted percentage score that considers the average difficulty of the exam and the average difficulty of the test items answered.

*Note: Policy Subject to Change*

6/26/12/BNP Faculty
Bachelor of Science in Nursing - BNP Post Licensure (RN-BSN)

Program Requirements

General Education
CHEM 101/CHM 101L — Survey of Chemistry (NSC II) 4
NURB 499C — Advanced Nursing Practicum 3

General Education Total 37

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.

BNP-RN Requirements

Post Licensure Requirements 50
NUR 375 — "K" credit lower level nursing courses 32K
NURB 326 — Advanced Health Assessment 2
NURB 327 — Transition to Professional Nursing 4
NURB 361 — Introduction to Nursing Research 3
NURB 424 — Public Health 3
NURB 461 — Nursing Leadership and Management 3
NURB 498 — Nursing Senior Seminar 3

Supplemental Requirements 29-31
BIOL 217/BIOL 217L — Elementary Medical Biology 4
Choose one of the following:
BIOL 234 — Principles of Human Anatomy and Physiology I, and BIOL 235 — Principles of Human Anatomy and Physiology II, or
BIOL 244 — Human Anatomy and Physiology I, BIOL 244A — Human Anatomy and Physiology I Lab, BIOL 245 — Human Anatomy and Physiology II, and BIOL 245A — Human Anatomy and Physiology II Lab
BIOL 336 — Pathophysiology 4
MATH 353 — Statistics 3
NURS 345 — Global Health 3
NURS Elective 300 or higher 6
PSY 156 — Lifespan Developmental Psychology 3

“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.

Components of Degree Requirements

General Education 37
BNP (RN-BSN) Requirements 50
Supplemental Requirements 29-31
General Electives 2-4

TOTAL PROGRAM REQUIREMENTS 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 NURB course required in semester two and semester three of the RN-BSN online program curriculum will be restricted to unconditional/officially admitted students.

Admission procedures, curriculum requirements and course sequencing may be changed as part of the process of the 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
<table>
<thead>
<tr>
<th>Course Abbreviation</th>
<th>Course Name</th>
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<td>ACCT</td>
<td>Accounting</td>
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<td>WST</td>
<td>Women's Studies</td>
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180  Course Abbreviations
NOTES

Courses are arranged alphabetically by discipline.
(3-0-3) following a course title means three hours class, no laboratory, three hours credit.

ACCT - Accounting Courses

(3-0-3)
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)
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.)
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.

(3-0-3)
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)
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)
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)
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)
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; withholdings.

ACCT 388. Practice in Personal Tax Accounting.
(3-3-3)
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)
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)
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.)  
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)  
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.)  
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)  
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.)  
Prerequisites: completion of 18 hours 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)  
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)  
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)  
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.)  
Prerequisites: completion of 18 hours 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)  
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)  
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 and capital budgeting.

ACCT 495. Business Valuations.  
(3-0-3)  
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)  
The importance of agriculture in the community, state, nation and world, including career opportunities.

AGR 102. Agricultural Experience.  
(1 to 2 hrs.)  
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)  
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)
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)
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)
Includes review of elementary horsemanship (stock seat) techniques; handling horses properly from the ground; grooming and tacking-up; more advanced riding skills such as rein and leg aides; correct body position; halts, turns and figure work; trail riding; and parts of the horse, bridle and saddle, all in relation to western riding.

AGR 119. Intermediate Horsemanship (Saddle Seat). (0-2-1)
Includes review of elementary horsemanship (saddle seat) techniques; handling horse properly from ground; grooming, tacking-up; more advanced riding skills such as leg aides, rein aides 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)
Intermediate review of elementary horsemanship (hunt seat) techniques; handling horse properly from ground; grooming, tacking-up; more advanced riding skills such as leg aides, rein aides 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)
Fundamental genetics, nutrition and physiology of beef and dairy cattle, swine, sheep and horses.

AGR 143. Anatomy and Physiology of Livestock. (3-0-3)
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)
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)
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)
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)
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)
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)
Prerequisite: CHEM 101 or CHEM 111. 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)
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 213. Landscape Design. (2-2-3)
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)
A study of the basic principles underlying horticultural practices in fruit growing, vegetable gardening, landscape gardening and floriculture.
(3-0-3)  
Prerequisite: AGR 133. This course will provide students with an overview of leadership concepts as they relate to agriculture. Students will learn principles with emphasis on styles of leadership, types of management, group dynamics, managing change and conflict resolution as applied to agriculture and agribusiness.

AGR 218. Principles of Food Science.  
(3-0-3)  
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)  
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)  
Prerequisite: AGR 133. An introduction to growth, development and fattening of meat animals. Evaluation of live animal and carcass characteristics of cattle, sheep and swine.

(2-2-3)  
Prerequisite: AGR 215. Study of the greenhouse industry, media, watering, fertilization, insects, diseases, chemical growth regulators, hydroponics and cost-accounting.

AGR 223. Animal Diseases and Parasites.  
(2-2-3)  
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.)  
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.)  
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)  
Prerequisite: AGR 133. 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)  
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)  
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)  
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 263. Animal Welfare.  
(3-0-3)  
This course offers an overview of the science of animal welfare 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)*  
*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)*  
*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)*  
Land resources, capabilities and uses; land use planning; agricultural, construction, mining, and other use effects on soil resources, geologic and accelerated erosion; soil pollution, economics of soil conservation; conservation practices and philosophies.

**AGR 312. Soil Fertility and Fertilizers.**  
*(3-0-3)*  
*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)*  
*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)*  
*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)*  
*Prerequisites: AGR 133 and CHEM 201 or CHEM 112.* 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)*  
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)*  
*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)*  
*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)*  
*Prerequisite: AGR 215.* Principles of commercial and home vegetable production and handling. Includes soil; ecological and economic factors which influence production; producing for fresh and processing markets; varieties, pest control, cultural practices and mechanization.

**AGR 323. Interior Landscaping.**  
*(2-2-3)*  
*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)*  
*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)*  
*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)*  
*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)*  
*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)*  
*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)*  
*Prerequisite: AGR 221.* 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)*  
*Prerequisite: AGR 222.* 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)  
Prerequisite: AGR 221. Develop skills of performance equitation. Specific skills needed in driving, training and showing of saddle seat style horses.

(1-4-3)  
Prerequisite: AGR 221. Develop skills of performance equitation. Specific skills needed in training or showing of hunter horses, jumping and course design.

AGR 335. Equitation Teaching.  
(2-2-3)  
Prerequisite: AGR 221. The techniques of horsemanship and methods of equitation instruction.

AGR 336. Dairy Production.  
(2-2-3)  
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)  
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)  
Prerequisite: AGR 222. 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.)  
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)  
Prerequisite: AGR 133. 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)  
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)  
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)  
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)  
Selection, operation, maintenance, and servicing of agriculture power and machinery units.

(3-0-3)  
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)  
Prerequisite: AGR 243. 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)  
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)  
Prerequisite: AGR 204. 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)  
Prerequisite: AGR 204. 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.)  
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)  
Prerequisite: AGR 301. 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.

(3-0-3)  
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)  
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.

**AGR 415. Animal Nutrition.**  
(2-2-3)  
*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.)  
*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)  
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.)  
*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.**  
(2-2-3)  
*Prerequisites: AGR 143 or VET 108, and AGR 243.* 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.

**AGR 485. Teaching Agricultural Mechanics.**  
(3-0-3)  
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)  
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)  
The principles and techniques needed in individual group supervision of vocational agricultural programs.

**AGR 499C. Senior Seminar in Agriculture.**  
(3-0-3)  
*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)  
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)  
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)  
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 Foundations.**  
(2-2-3)  
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)  
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)  
This course is 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, and design. The course will balance design and art-based brainstorming and problem-solving approaches. The course is required for, but not limited to, art majors, minors and convergent media students.

**ART 112. Drawing Foundations.**
*(2-2-3)*
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)*
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)*
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)*
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.**
*(3-0-3)*
*Prerequisites: ART 100 and ART 109.* This course introduces history, theory, concepts and techniques required in graphic design. Students are introduced to layout; color theory and use; design, photo and illustration techniques; and exploration of media in respect to digital design. This course will also integrate concepts regarding the production process including prepress, printing and other production techniques and distribution.

**ART 207. Websites II.**
*(2-2-3)*
*Prerequisite: ART 206 or permission of instructor.* In this course, students will bring animation to the Web using Flash, HTML5 and JavaScript. The course explores the rich animation capabilities of all three Web technologies, covering both basic and advanced interactivity. Students will create content for the Web, mobile devices, CDs, videos and stand-alone desktop applications. Techniques emphasizing editing and compression methods will also be explored. This course gives students enough proficiency to create exciting Web animation that communicates the unlimited potential of the Web environment.

**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)*
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)*
Introduction to ceramic forms in hand building, wheel-throwing, glazing and decorative techniques.

**ART 263. World Arts.**
*(3-0-3)*
A multidisciplinary introduction to world aesthetic traditions within cultural and historical contexts. This course satisfies the HUM I requirement for general education.

**ART 264. Ancient-Medieval.**
*(3-0-3)*
An examination of ancient Near Eastern, Egyptian, Greek, Roman, and Medieval art. It includes a study of materials, techniques, subjects, styles, issues, functions and meanings. Equates with IST 264.

**ART 265. Renaissance-Modern.**
*(3-0-3)*
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)*
*Prerequisite: ART 102.* Creative experiences in the techniques, media, and tools of sculpture, work in stone, wood, metal, clay and plaster.

**ART 300. Teaching Elementary and Middle School Art.**
*(2-2-3)*
*Prerequisite: declared Art Teaching (P-12) area or major or permission of instructor.* Philosophical and curricular aspects of art for elementary and middle school. This course includes field experience.
ART 301. Field Experience in Art Education.  
(1-2-3)  
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)  
Prerequisites: ART 109, 205 or consent of department. An introduction to the relevance of letterforms in graphic design and visual culture. This studio course uses digital methods to address the language of type and its effective use. Students will study the language of type through its history and application, gaining a strong working knowledge of this essential element to graphic design.

ART 304. Drawing II.  
(2-2-3)  
Prerequisite: ART 112. A continuation of ART 112.

ART 305. Graphic Design II.  
(2-2-3)  
Prerequisites: ART 109 and 205. A study of three-dimensional design with emphasis on product and package design.

ART 306. Websites III.  
(2-2-3)  
Application of the principles of graphic design to Web publishing. Emphasis on creative website design solutions through image preparation, typography and color design for individual and corporate clinics.

ART 307. Arts Administration Practicum I.  
(1-0-1)  
Prerequisite: ART 200. Experiential learning in arts administration through placement in the field.

(2-2-3)  
This course is designed to give students at an advanced level the opportunity to work with digital photography, digital image editing and management, as well as printing. The course focuses on Adobe Photoshop and its use, application and integration with other applications and peripherals. Students will be given instruction and guidance on advanced level software practices and techniques. Assigned projects will test their abilities to retain information about specific camera and software operations, as well as their creative ability to solve problems.

ART 310. Puppetmaking.  
(2-2-3)  
The historical and contemporary significance of puppetry including the techniques and methods of construction and production.

ART 314. Painting Techniques II.  
(2-2-3)  
Painting from still life and landscape with emphasis on creative interpretation and expression.

ART 316. Watercolor I  
(2-2-3)  
Introduction to watercolor media and methods and to the use of various subjects.

ART 320. Survey of Graphic Design.  
(3-0-3)  
An exploration of the origins and evolution of graphic design and graphic design from ancient civilization to the 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)  
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 333. Design Layout and Pre-Press.  
(2-2-3)  
Prerequisite: ART 205 or permission of instructor. This course is designed to give students an opportunity to learn essential layout and pre-press and techniques for print projects using Adobe InDesign and Adobe Acrobat. Building on principles learned in ART 205, students will utilize InDesign to create marketing and advertising materials for print. Techniques emphasizing text and image formatting, color and pre-press will be explored. The course will balance art, design and print related problem solving.

ART 345. Ceramics II.  
(2-2-3)  
Prerequisite: ART 245. Individual work in wheel-throwing, hand building, operation of kilns and basic experiments in glazing.

ART 351. Intaglio Printmaking.  
(2-2-3)  
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)  
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)  
The history of Western painting, sculpture and architecture from prehistoric times until the beginning of the Christian era.

(3-0-3)  
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)  
The history of European painting, sculpture and architecture from c. 1300 until c. 1525.

ART 364. Mannerist and Baroque Art.  
(3-0-3)  
The history of European painting, sculpture and architecture from c. 1525 until c. 1750.
ART 373. Basic Black and White Photography.  
(2-2-3)  
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)  
Prerequisite: ART 294. Studio problems involving the manipulation of various sculpture media.

ART 399. Selected Topics.  
(3-0-3)  
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.)  
Prerequisites: 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 401. Arts Administration Practicum II.  
(2-0-2)  
Prerequisites: ART 200 and ART 307. Experiential learning in arts administration through placement in the field.

ART 404. Drawing III.  
(2-2-3)  
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)  
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)  
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)  
Prerequisites: ART 112 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.)  
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)  
Prerequisites: ART 205 and 214. An introduction to the 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. Motion Graphics.  
(2-2-3)  
Prerequisites: ART 309, Adobe Certification in Photoshop, or consent of department. This course is designed to give students an opportunity to learn and work with programs that will allow them to animate their ideas. The course begins with more traditional cell-by-cell and digital camera and video techniques and then progresses to non-linear video editing (Adobe Photoshop & After Effects) and concepts in vector animation (Adobe Flash).

ART 411A. Drawing.  
(2-2-3)  
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)  
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)  
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)  
Experiences leading toward individual achievements in styles and techniques.

ART 430. Private Applied Art Education Studies.  
(1-6 hours)  
Prerequisites: 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)  
Prerequisites: 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)  
Prerequisites: 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 two-dimensional artwork. Special emphasis on experimentation and the development of a body of work.

ART 433. Private Applied 3-D Studies.  
(1-6 hours)  
Prerequisites: 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)  
Prerequisites: Students 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, 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)  
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)  
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)  
Prerequisite: ART 351. Advanced studio in intaglio printmaking. Techniques include engraving, mezzotint, color intaglio, photolitho and color monotype. May be repeated for credit.

ART 452. Lithographic Printmaking Studio.  
(2-2-3)  
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)  
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)  
The painting, sculpture and architecture of the 20th century.

ART 463. Art of the United States.  
(3-0-3)  
A survey of the social, political and cultural movements which affected the course of American artistic development.

(3-0-3)  
A survey of the painting, sculpture and architecture of Spain, Portugal and Latin America.

ART 467. Native American Art.  
(3-0-3)  
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)  
This course will provide a survey of the arts of the Appalachian region from precolumbian times to the present.

ART 473. 35mm Photography.  
(2-2-3)  
Prerequisite: ART 373. Advanced small format shooting and darkroom techniques exploring various subjects and styles.

ART 474. Photo Studio.  
(2-2-3)  
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)  
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)  
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)  
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)  
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)  
Prerequisites: 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)  
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)  
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)  
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)  
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)  
Investigation of specific topics in astronomy. This course may be repeated in additional subject areas.

(3-0-3)  
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)  
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)  
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)  
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)  
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)*  
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)*  
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 track 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)*  
Prerequisite: 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)*  
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)*  
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)*  
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)*  
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)*  
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)*  
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.)*  
Prerequisites: eight hours from BIOL and 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)*  
Prerequisite: BIOL 171. A survey of animals from protozoa to mammalia with emphasis on phylogeny, evolution, comparative morphology and physiology.

**BIOL 213. Introduction to Veterinary Microbiology.**  
*(2-4-4)*  
Prerequisites: 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 for biology majors or minors.

**BIOL 215. General Botany.**  
*(2-4-4)*  
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)*  
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 233. Laboratory for Human Physiology.
(0-2-1)
Prerequisites: BIOL 235 or equivalent (may be taken concurrently) and consent required. 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 234. Principles of Human Anatomy and Physiology I.
(3-0-3)
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 or minor in biology.

BIOL 235. Principles of Human Anatomy and Physiology II.
(3-0-3)
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. Homeostatic regulatory mechanisms will be continually emphasized.

BIOL 244A. Human Anatomy and Physiology I Lab.
(0-2-1)
Prerequisites: BIOL 171 or BIOL 234. This laboratory is a study of human cells, tissues and organ systems utilizing anatomical models, computer programs, histology, dissection and/or physiological experiments designed to supplement BIOL 244.

BIOL 245. Human Anatomy and Physiology II.
(3-0-3)
Prerequisite: BIOL 244A. Corequisite: BIOL 245A. This course is a study of human organ systems (endocrine, reproductive, cardiovascular, lymphatic, digestive, respiratory and renal) with a continual focus on homeostasis and the interrelationship of form and function. Molecular mechanisms will be emphasized.

BIOL 245A. Human Anatomy & Physiology II Lab.
(0-2-1)
Prerequisite: BIOL 244A or BIOL 235. This laboratory is a study of human cells, tissues and organ systems utilizing anatomical models, computer programs, histology, dissection and/or physiological experiments designed to supplement BIOL 245.

BIOL 301. Fundamentals of Biochemistry.
(3-2-4)
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.

(1-0-1)
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)
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)
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)
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)
Prerequisite: BIOL 215. Identification and classification of plants native to the area. Collection and herbarium techniques.

BIOL 334. Entomology.
(2-2-3)
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)
Prerequisites: BIOL 235 or BIOL 245/245A, 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)
Prerequisite: BIOL 210 or BIOL 245/245A. 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)
Prerequisite: BIOL 210 or BIOL 245/245A. Vertebrate development from gamete formation through the fetal stage; emphasis on comparative structural development.

BIOL 350. Heredity and Society.
(3-0-3)
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)
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)
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)
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)
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)
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)
Prerequisites: BIOL 304 and CHEM 201 or CHEM 326. Integration of biological, chemical and physical aspects of the cell. Emphasis on molecular processes.

BIOL 385. Neurobiology.
(3-0-3)
Prerequisites: BIOL 304. This course will study the nervous system from a cellular and molecular perspective. Topics covered will include electrical properties of neurons, intracellular signaling, plasticity, regeneration, and nervous system development.

BIOL 399. Selected Workshop Topics.
(1 to 4 hrs.)
Prerequisites: eight hours from BIOL and 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)
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, physics 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)
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)
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)
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)
Prerequisite: 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)
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)  
Prerequisites: BIOL 301 or CHEM 301 and BIOL 245/245A or 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)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
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.)  
Prerequisite: approval of department chair. Work experience with an in-depth exposure representative of the student's academic level. Not accepted as an elective course for the areas and minor in biology.

BIOL 443. General Parasitology.  
(2-2-3)  
Prerequisite: BIOL 210. Protozoan, helminth and arthropod parasites of man and domestic animals; emphasis on etiology, epidemiology, diagnosis, control and general life histories of parasites.

BIOL 444. Clinical Laboratory Procedures.  
(2-3-3)  
Prerequisites: BIOL 245/245A and BIOL 301 or CHEM 301. The clinical laboratory plays a significant role in the ever changing arena of modern medicine. It is the purpose of this course to provide current technical and clinical information about laboratory procedures to permit the student to adequately understand, select and interpret each specific procedure.

BIOL 446. Biotechnology.  
(2-2-3)  
Prerequisites: BIOL 301, or CHEM 301 and BIOL 304. Advanced theory and methods in genetic engineering, protein expression and purification, and practical applications of immunoglobins; transgenic organisms and agricultural biotechnology are also covered.

BIOL 447. Organ Systems Physiology.  
(4-0-4)  
Prerequisites: BIOL 245/245A and BIOL 301 or CHEM 301. Specific focus on three integrating themes: the interrelationships of human organ systems, homeostasis and the complementing relationship of structure and function. Homeostatic regulatory mechanisms between interactive organ systems will be continually emphasized, as well as how the body meets its changing demands during the onset of various pathological conditions.

BIOL 449. Plant Anatomy.  
(2-2-3)  
Prerequisite: BIOL 215. Gross and microscopic studies of internal and external structures of vascular plants. The cell, meristem, cambium, primary body, xylem and phloem; roots, stems and leaves; flowers and fruits; ecological anatomy.

BIOL 452. Aquatic Entomology.  
(1-4-3)  
Prerequisite: BIOL 210. Survey of aquatic insects, their ecology, their biology, and how they are used as environmental biomonitor. Emphasis is placed on using taxonomic keys for insect identification and field sampling techniques. Extensive field work is expected, some all-day field trips required.
BIOL 454. Environmental Education. (2-2-3)
Prerequisite: eight hours from BIOL. Distribution and reserve depletion of wildlife, forest, land, water, air and mineral resources; emphasis on population, pollution and environment. Field trips to environmentally important areas are required. Not acceptable as credit for area in biology or minors. Especially designed for in-service and pre-service teachers.

BIOL 456. Plant Morphology. (2-2-3)
Prerequisite: BIOL 215. Fossil and living nonvascular plants (except bacteria) and vascular plants; emphasis on ecology, morphology and evolution.

BIOL 461. Ecology. (2-2-3)
Prerequisites: 12 hours from BIOL plus eight hours from CHEM. Interrelations of organisms and environment. Some all day field trips required.

BIOL 473. Medical - Veterinary Entomology. (2-2-3)
Prerequisite: BIOL 171, BIOL 210, AGR 233, or VET 218, or equivalent. Emphasis is placed on the identification, life history, behavior and ecology, and prevention and control of insects and arachnids of medical and veterinary importance, as well as the viral, bacterial, protist, and filarial pathogens they may transmit to humans and domesticated animals.

BIOL 476. Special Problems. (1 to 6 hrs.)
Prerequisite: consent required. Independent topics and research in the biological and environmental sciences. Topic must be approved prior to registration by the department chair.

BIOL 478. Animal Behavior. (3-0-3)
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)
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.)
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)
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)
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, radiotopic labeling and statistical analysis of experimental data.

BIOL 499C. Contemporary Environmental Issues. (3-0-3)
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)
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, speciation, and macroevolutionary patterns. This course satisfies the integrative component for general education for students completing an area in biology.

BIOL 499E. Current Issues in Biomedical Science. (3-0-3)
Prerequisites: BIOL 171, CHEM 111 and senior standing. This course will discuss situations that students may encounter in their professional career and provide the knowledge required to assemble a rational framework for ethical decision making. This course satisfies the integrative component for general education for students completing an area in biomedical science.

BBA - Business Administration Courses

BBA 261. Business Law and Regulations. (3-0-3)
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.

BBA 295. Business Communication. (3-0-3)
This course introduces students to current foundations, processes and practices in business and technical communications that stress teamwork, human relations, ethics, demographic diversity, hands-on applications, social media, and global and cross-cultural communications. The focus is on both written and oral communications and their application in organizations.
BBA 301. The Healthcare System.
(3-3-3)
The U.S. healthcare industry is one of the fastest growing industries in the country. This course provides an orientation and overview to the important area of healthcare systems and the ongoing transformation, emerging trends and issues in this area. A summary of the American Health Care System and its driving forces: organizational forms; financing mechanisms; principal industry stakeholders; professional groups and workforce issues will be reviewed.

BBA 315. Quantitative Analysis for Business.
(3-0-3)
Prerequisite: MATH 305. Using spreadsheet software, quantitative models needed for decision making in a wide variety of business applications are examined. Specific topics included: descriptive statistics and charts (used to summarize cross-sectional and time series data), decision trees and analysis, hypothesis testing and ANOVA, simple and multiple regression models (variation, relationships, predictions), time series forecasting models (pattern identification, model appropriateness, model development), statistical quality control/Six Sigma, and business simulation.

BBA 350. Entrepreneurship and Innovation.
(3-0-3)
Prerequisites: MKT 204 and MNGT 201. This course introduces the student to entrepreneurial thought and the process for innovation/idea generation. Students begin to develop business skills essential to the entrepreneurial experience. Students are introduced to the basics of business and challenged to think creatively about forming businesses or designing products to solve customer problems and address unmet needs in the commercial and social arenas.

BBA 363. Ethical Decision Making in Business.
(3-0-3)
Prerequisite: MNGT 201. This course is designed to assist students as future corporate decision makers to have an appreciation for the ethical implications of their actions, as well as the complex relationship between business and wider society. Ethics at both the micro and macro levels in organizations are explored. Various ethical theories and their practical applications for making decisions in the business environment are discussed, as well as a strategic framework that encompasses the ethical elements that need to be evaluated when implementing corporate policies that affect stakeholders. Through self-reflection, case analysis, group discussions, in-class debates and presentations, students will learn to apply theoretical and practical ideas to real life business situations.

(3-0-3)
Prerequisite: MNGT 201. This course examines the management of operations, focusing on both the strategic and tactical operational decisions required in such service sectors as healthcare, banking and financial services, transportation, and restaurants/hotels/resorts. Concepts related to and analytical models supporting the following operations management topics are examined in this course: facility location, designing and implementing service systems, service quality (measuring, assessing, improving), capacity planning and queuing, inventory control processes, just-in-time/lean systems and supply chain management.

(3-0-3)
Prerequisites: ECON 101 or ECON 201 and ECON 202. This course examines the theories, institutions and environmental elements that underlie conducting business in an international setting. Topics include: national business systems, patterns of world trade, regional and multilateral integration, international trade and investment, the global financial system, internationalization of the firm and the operating procedures of the multinational enterprise.

BBA 475. Leadership Development.
(3-0-3)
Prerequisite: MNGT 201. Corequisite/Prerequisite: BBA 363. This course is designed to develop the knowledge and skills needed to exercise effective leadership in groups and organizations. The course explores theories and research from various fields that inform the current practices of leadership in the modern workplace. Emphasis is placed on the practical application of these theories and the applied development of leadership and interpersonal skills through self-assessments, case analyses, field interviews, experiential exercises, personal reflection, creation of an individualized leadership-development plan, presentations and hands-on collaboration with a team on a leadership project during the semester.

BBA 499C. Strategic Management.
(3-0-3)
Prerequisites: BBA 315, FIN 360, MKT 204, MNGT 201, BBA 295, BBA 370, CIS 311 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.

BIS - Business Information Systems Courses

(3-0-3)
Prerequisites: BBA 295 and MNGT 201. 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 499C. Methods of Teaching Business and Information Technology Education.
(3-0-3)
Application and integration of field experiences, teaching and learning approaches to create objectives, lesson plans, skill building techniques; use of methods, materials, technology, teaching aids, 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.
CTE - Career and Technical Education Courses

CTE 185. New Teacher Institute Career and Technical Education.  
(3-0-3)  
Restriction: for 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)  
Orientation for students enrolled in a career and technical teaching program in agricultural education or industrial education. Course will provide an overview of career and technical education. Field experience required.

CTE 364. Guidance in Career and Technical Education.  
(3-0-3)  
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)  
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)  
Courses will be offered only through a scheduled, written 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)  
Offered only through scheduled, technical competence examinations. (Written, performance and oral examinations in the field of specialization that the candidate is preparing to teach.)

(0-0-6)  
Courses will be offered only through a scheduled, oral 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)  
Prerequisite: CTE 207. A comprehensive study of current curriculum content in career and technical education. Emphasis on modifying and developing new curricula. Field experience required.

CTE 392. Methods of Instructional Technology.  
(2-2-3)  
Restriction: admission to TEP. Holistic approach to curriculum development with an introduction to the use of technology to develop and enhance curriculum and instruction. Field experience required.

CTE 393. Methods in Career and Technical Education.  
(3-0-3)  
Basic principles of teaching and learning with practical applications of procedures used in career and technical education programs.

CTE 394. Practicum in Career and Technical Education.  
(4 to 8 hrs.)  
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.)  
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)  
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)  
Restriction: four years of successful teaching experience in career and technical education. Prerequisite: consent of the instructor. 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)  
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)  
*Restriction: admission to TEP.* The principles of instructional methods which apply to the teaching of career and technical education subject matter. Field experience required.

**CTE 478. Student Teaching Practicum.**  
(12-0-12)  
*Restriction: admission to TEP.* Each student is assigned to an approved student teaching center offering comprehensive teaching experience in career and technical education.

**CTE 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. Field experience required.

**CTE 497. Seminar in Career and Technical Education.**  
(1-0-1)  
Current problems, issues and trends in vocational education.

**CHEM - Chemistry Courses**

**CHEM 101. Survey of Chemistry.**  
(3-2-4)  
*Prerequisite: MATH 093 with grade of "A" or "B" or MATH 131 with grade of "C" or higher or MATH 135 with a grade of "C" or higher or ACT Math score of 19 or above.* A survey of chemical topics that includes describing and applying atomic structure concepts to the particulate nature of matter; identifying and relating periodic table trends to atomic structure; using basic nomenclature rules for inorganic compounds; using conservation of matter and energy with stoichiometry for chemical reactions; articulating relationships between molecular structure, bonding and intra- and intermolecular forces. 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)  
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.**  
(3-2-4)  
*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 112. Principles of Chemistry II.**  
(3-2-4)  
*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 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.)

**CHEM 201. Survey of Organic Chemistry.**  
(3-2-4)  
*Prerequisite: grade of "C" or better in CHEM 101.* A survey of chemical topics that includes organic synthesis and redox reactions, organic functional groups, energy/fuels, pharmaceuticals, herbicides, insecticides, polymers, carbohydrates, proteins and lipids. The topics are covered in combination with case studies such as the pollution of the environment and the use of different energy sources. 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 hours)  
*Prerequisite: consent of department chair.* Participation in supervised work experience in a professional environment.

**CHEM 299. Selected Topics.**  
(1 to 6 hrs.)

**CHEM 301. Fundamentals of Biochemistry.**  
(3-2-4)  
*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)  
*Prerequisite: grade of "C" or better in CHEM 112 Structure, nomenclature and physical properties of organic molecules; organic reactions reagents and mechanisms including alkanes, alkyl halides, alcohols, ethers, polymers and radicals; IR, NMR and Mass spectroscopy, with laboratory.

**CHEM 327. Organic Chemistry II.**  
(3-2-4)  
*Prerequisite: grade of "C" or better in CHEM 326.* Reactions and reaction mechanisms of dienes, aromatics, aldehydes, ketones,
carboxylic acids and derivatives, phenols, amines and organometallics, with laboratory.

CHEM 328. Organic Chemistry III.
(2-4-4)
Prerequisite: grade of "C" or better in CHEM 327. Advanced topics in organic chemistry; orbital symmetry, heterocyclics and polycyclics, macromolecules, carbamion reactions, and an introduction to physical organic chemistry, with laboratory.

CHEM 332. Environmental Chemistry II.
(3-0-3)
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.)
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

CHEM 340. Chemical Information.
(1-2-2)
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.
(2-2-3)
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)
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. Stoichiou and equilibria concepts will be pursued through lecture and applicators in the instrumental labs.

CHEM 399. Selected Topics.
(1 to 6 hrs.)
 CHEM 429. Pharmaceutical Chemistry.
(3-0-3)
Prerequisites: "C" or better in CHEM 327 and "C" or better in CHEM/BIOI 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 399. Cooperative Education.
(1 to 8 hrs.)
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

CHEM 441. Physical Chemistry I.
(3-0-3)
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)
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)
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)
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.)
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.)
CHEM 499C. Chemistry Senior Project I.
(0-2-2)
Prerequisites: completion of CHEM 360 with a grade of "C" or higher and completion of either CHEM 441 or CHEM 327 with a grade of "C" or higher. Students are introduced to the basics of chemical research, including planning and implementing goals, reading the chemical literature, analyzing data, drawing conclusions, and introductory written and oral presentations of research. This course satisfies the integrative component for general education.

CHEM 499D. Chemistry Senior Project II.
(0-1-1)
Prerequisites: completion of CHEM 499C with a grade of "C" or higher. Continued work on research and the written and oral presentation of research. The project will culminate in an oral presentation of the project to the chemistry faculty and a written presentation in the format of a scientific journal article. This course satisfies the integrative component for general education.
CHI - Chinese Courses

CHI 101. Elementary Chinese I.
(3-0-3)
An introduction to listening, speaking, reading and writing Mandarin Chinese, with some attention to culture.

CHI 102. Elementary Chinese II.
(3-0-3)
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)
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)
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)
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)
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.

CVM - Convergent Media Courses

CVM 110. History of Communication Media.
(3-0-3)
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.

CVM 140. Field Production Practices.
(3-0-3)
Corequisite: CVM 140L. An introduction to the practical applications of field production as it relates to audio, video and new media. Practice in application of stages of production. Includes program/product conception and various forms of dissemination.

CVM 201. Media Writing.
(3-0-3)
An introduction to methods, styles, techniques and formats used in nonfiction writing for the media. Includes instruction on legal, ethical and social considerations.

CVM 210. Media Literacy.
(3-0-3)
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. Formerly CMEM 210. This course satisfies the HUM I requirement for general education.

CVM 240. Elements of Studio Production I.
(2-2-3)
Corequisite: CVM 240L. An introduction to the basic production elements for audio and video. Includes message development and differentiation for various mediums.

CVM 250. Content Gathering Techniques.
(3-0-3)
Prerequisite: CVM 140 and CVM 201. Study and application of sources, methods and technologies used in gathering and producing material for print, broadcast and online presentation. Includes instruction on the legal and ethical responsibilities of producing and disseminating multimedia content.

CVM 277. Convergent Media Practicum.
(0-1-1)
Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

CVM 301. Newswriting and Reporting.
(3-0-3)
Prerequisites: CVM 140 and CVM 201. Gathering, organizing and writing news for mass media.

CVM 320. Feature and Documentary Writing.
(3-0-3)
Prerequisite: CVM 140, CVM 201, and CVM 250. 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.

CVM 340. TV Studio Practices.
(2-2-3)
Prerequisites: CVM 140 and CVM 240. Corequisite: CVM 340L. TV studio production techniques and an introduction to directing skills in a laboratory setting.

CVM 350. Audio Production and Direction.
(2-2-3)
Prerequisite: CVM 240. Corequisite: CVM 350L. A study of the theory and application of audio production for convergent media.

CVM 358. Sportswriting.
(3-0-3)
Prerequisite: CVM 140, CVM 201, and CVM 250. Philosophy and techniques in writing sports events stories, sports analysis and commentary for the media.
CVM 377. Convergent Media Practicum. 
(0-1-1) 
Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

(3-0-3) 
Prerequisites: CVM 140, CVM 201, CVM 250, and CVM 301. 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.

CVM 452. Issues in Contemporary Media. 
(3-0-3) 
Prerequisite: senior standing. Treatment of current issues within the electronic media industry. Equates with WST 452.

CVM 462. Media Criticism. 
(3-0-3) 
Examination of broadcasting in sociological, aesthetic, historical, psychological and humanistic terms.

(3-0-3) 
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.

(3-0-3) 
Prerequisite: CVM 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.

CVM 476. Special Problems. 
(1 to 3 hrs.) 
Prerequisite: consent of department chair. Research on an original project with appropriate written report within a subject area.

CVM 477. Convergent Media Practicum. 
(0-1-1) 
Practical experience and professional opportunities in newsgathering, writing, reporting and news presentation.

CVM 481. Documentary Production. 
(2-2-3) 
Prerequisite: ART 109, CVM 140, CVM 201, and CVM 250. Corequisite: CVM 481L. The study and application of theories and techniques used in documentary video production.

CVM 483. Animation Production. 
(2-2-3) 
Prerequisites: ART 109 and CVM 140. Corequisite: CVM 483L. The study of traditional animation production techniques. Application of the theories and techniques of traditional animation video production.

CVM 485. Narrative Video Production. 
(2-2-3) 
Prerequisite: ART 109, CVM 140, CVM 201, and CVM 250. Corequisite: CVM 485L. The study and application of production techniques and theories used in narrative video production.

CVM 492. Media Law and Ethics. 
(3-0-3) 
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.

COMS - Strategic Communication Courses

COMS 100. Introduction to Strategic Communication. 
(3-0-3) 
An overview of the field and its various subdisciplines, including public relations, leadership, group facilitation, training and conflict treatment. Focus on history of the field and communication theories that support practical activity in professions and society. Balanced emphasis on face-to-face and device-mediated messaging.

(3-0-3) 
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. Formerly COMM 108. This course satisfies the required core-oral communications for general education.

COMS 110. Strategic Messaging. 
(3-0-3) 
Students will demonstrate the ability to communicate effectively in oral, written and mediated channels to achieve desired goals. Students will develop skills in the use of sound and moving/still images for the production and communication of messages.

COMS 200. Strategic Communication Research. 
(3-0-3) 
An introduction to research methods professionals use to design and evaluate strategic communication. The course emphasizes focus group, survey, and interview methods used for audience analysis. Additional attention is given to the effective use of bibliographic databases, along with the selection and application of communication technology for gathering primary data.

COMS 250. Introduction to Intercultural Communication. 
(3-0-3) 
Prerequisite: COMS 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. Formerly COMM 250. This course satisfies the SBS I requirement for general education.

COMS 277. Professional Practices.  
(1-0-1)  
Students learn basic job search skills for internship and entry-level positions as a communication professional. Focus is on writing a resume, practicing job interviews, learning to network, and identifying "soft skills" valued by employers.

COMS 290. Conflict and Communication.  
(3-0-3)  
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. Formerly COMM 290. This course satisfies the HUM II requirement for general education.

COMS 300. Strategic Organizational Leadership.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. Study of organizational communication concepts and theory, with an emphasis on how leaders use communication strategically to build and sustain organizations that incorporate new technologies, transform workplace values, and increase multiculturalism. Students develop communication skills for establishing positive interpersonal relationships at work and promoting effective teamwork, using face-to-face and mediated channels of communication.

COMS 310. Professional Presentations and Speech Writing.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. As future professionals, employers will expect students to be confident speakers who can organize and prepare clear, concise and interesting presentations. This course prepares students by developing their speaking and delivery skills. In addition, students will use critical thinking and analytical skills to solve problems, build arguments and use creativity to develop presentations. This course is designed to help students become confident presenters, as well as savvy speech writers.

COMS 330. Argumentation and Persuasion.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. A focus on the strategic design of persuasive messages in interpersonal, group and public settings including various media. Topics include professional ethics, critical analysis of audience and situational factors, theories of persuasion, the development of rational arguments, selection of appropriate communication channels, and effective delivery of persuasive messages.

COMS 333. Social Media and Community.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. This course introduces learners to essential social media technology while framing the adoption and use of social media as communication within communities. Learners describe, analyze and evaluate socially-mediated communication, exploring its potential to create and maintain the conditions for community and to facilitate change. Professional opportunities in social media and community will be explored.

COMS 339, 439. Cooperative Education.  
(1 to 8 hrs.)  
Prerequisite: consent of department chair. The Department of Communication, Media and 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.

COMS 340. Event Planning and Public Relations.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. This course will examine the basic principles and procedures of effective planning, management and execution of small and large scale conferences, meetings, and events. Throughout the semester, students will examine the principles associated with event planning and public relations. The semester will culminate in students carrying out the event they have planned.

COMS 347. Internship.  
(1 to 6 hrs.)  
Prerequisite: COMS 277. 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.

COMS 350. Communication, Culture and Diversity.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. Examination of the basic principles, practices, responsibilities and ethics in the profession of public relations. (Formerly COMM 250)  
COMS 370. Communication and Health.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. This course is a study of health communication concepts and theories with an emphasis on the relationship between communication and health-related problems. The course will examine multiple contexts of health communication including relationships, organizations and the mass media. The primary focus of the course is on improving health outcomes through improved communication.

COMS 382. Public Relations Principles.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. Examination of the basic principles, practices, responsibilities and ethics in the profession of public relations. (Formerly CMAP*382)

COMS 383. Facilitating Team Communication.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. Development of communication skills required for participating effectively in small groups and teams. Students will study and practice team building, group facilitation, problem solving, and performance assessment of task groups.

COMS 400. Interviewing.  
(3-0-3)  
Prerequisites: ENG 100 and COMS 108. A detailed study of the
various interview types, coupled with role playing experiences. Includes media, employment and healthcare interviews.

**COMS 405. Communication Issue Management.**
(3-0-3)
*Prerequisites: ENG 100 and COMS 108.* 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.

**COMS 420. Analysis of Persuasion.**
(3-0-3)
*Prerequisites: ENG 100 and COMS 108.* This course examines the foundations of persuasion through theory and practice in multiple contexts: interpersonal relationships, politics, advertising and speaking in diverse contexts. Students will observe, analyze and write about persuasive events as they happen in their everyday lives. This class will help students be better consumers of persuasion as they participate in the communities where they live and work, thus making them better engaged citizens.

**COMS 447. Internship.**
(1 to 6 hrs.)
*Prerequisite: COMS 277.* 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.

**COMS 476. Special Problems.**
(1 to 3 hrs.)
*Prerequisite: ENG 100 and COMS 108.* Research on an original project with appropriate written report within a subject area.

**COMS 482. Public Relations Campaigns.**
(3-0-3)
*Prerequisites: ENG 100 and COMS 108.* An examination of case studies involving specific practices in carrying out campaigns in public relations.

**COMS 499C. Senior Seminar in Communication.**
(3-0-3)
This course 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.

**CTMR - Computed Tomography/Magnetic Resonance Courses**

**CTMR 403. Computed Tomographic Physics and Instrumentation.**
(3-0-3)
*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)
*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)
*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)
*Prerequisites: CTMR 405 and 413. Corequisites: 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)
*Prerequisites: CTMR 403, 443, 467 and 483. Corequisites: CTMR 455, CTMR 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 applications, safety and quality assurance.

**CTMR 455. Imaging Procedures in Magnetic Resonance.**
(3-0-3)
*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)  
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)  
Prerequisites: CTMR 405 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-al/special procedures. Pre-examination, patient care preparation, and contrast administration procedures will be discussed.

CTMR 477. Advanced Imaging Practicum I.   
(0-40-4)  
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)  
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)  
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)  
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.

CIS - Computer Information Systems Courses

(3-0-3)  
Students will learn effective strategies for applying microcomputer software, including word processing, spreadsheet, presentation and database management. The course introduces concepts, terminology, and tools of the microcomputer software operating and applications 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)  
Prerequisites: CIS 101 or basic computer competency. This course will 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)  
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 205. Introduction to Programming - C++.   
(3-0-3)  
Prerequisite: CIS 200 or CS/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. Software Tools for Business.   
(3-0-3)  
This course prepares students to be proficient in problem solving through the application of spreadsheet and database tools. In addition, students are introduced to other decision support tools, such as electronic presentation tools and Web editors that are used in today’s global workforce.
CIS 214. Introduction to Programming-Java.
(3-0-3)
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 217. Contemporary IT Applications.
(3-0-3)
Prerequisites: Basic Computer Competency. 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.

CIS 295. Mobile Application Development.
(3-0-3)
This course focuses on design and development of mobile application development for the end-user environment. Case studies and problem activities in core business areas are used to address specific solutions for enhancing end-user productivity.

(3-0-3)
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)
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)
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)
Prerequisite: basic computer competency. 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)
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 320. Web Technologies and Design.
(3-0-3)
Prerequisite: basic computer competency. 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.

CIS 322. Systems Security and Information Assurance.
(3-0-3)
Prerequisite: basic computer competency. 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 326. Relational Databases and SQL.
(3-0-3)
Prerequisite: CIS 211, CS 170, or MATH 170. This course provides the students with an introduction to the core concepts in data and information management. Emphasis is on database concepts and fundamentals, ER (entity-relationship) approach to data modeling, the relational model to relational database design, and the use of query languages, such as SQL for relational database implementation and query processing.

CIS 330. Collaborative Technologies.
(3-0-3)
Prerequisite: Basic Computer Competency. 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 339. Cooperative Education III.
(1 to 8 hrs.)
Prerequisites: CIS 311 and consent of instructor. This course pro-
vides on-site instruction and practical work experience in the computer field in a paid position approved through an application process. A maximum of three credit hours is allowed as a CIS option elective.

(3-0-3)
Prerequisite: basic computer competency. 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)
Prerequisite: basic computer competency. 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)
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.)
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.

(3-0-3)
Prerequisites: CIS 311 or CS 380 and at least one from the following: CIS 202, CIS 205, or CIS 214. 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)
Prerequisites: CIS 211 and 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 426. Database Administration. 
(3-0-3)
Prerequisite: CIS 326. This course deals with the administration and management of databases. Emphasis will be on advanced database design, advanced database querying, database change management, data availability, database performance management, data integrity and security, database backup and recovery, disaster planning, data and storage management, and distributed databases.

CIS 430. Advanced Topics in Information Systems. 
(3-0-3)
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.)
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)
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)
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.)
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)  
Prerequisites: CIS 311 and senior standing. This is a senior-level course that integrates through 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)  
Prerequisites: senior standing in CIS and CIS 413. 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.

CS - Computer Science Courses

CS 170. Introduction to Computer Science.  
(3-2-4)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
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.

(3-0-3)  
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.

(3-0-3)  
Prerequisites: MATH 175 and CS 312. This course will cover mathematical topics including geometry, trigonometry, vector opera-
tions, 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)  
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)  
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)  
Prerequisite: 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)  
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.

(3-0-3)  
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.

(3-0-3)  
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)  
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)  
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.)  
Prerequisite: upper division standing; consent of department prior 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)  
Prerequisite: CS 310. 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)  
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)  
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. 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)  
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 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.

CRW - Creative Writing Courses

CRW 499C. Senior Thesis.  
(3-0-3)  
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 integrated component for general education.

CRIM - Criminology Courses

CRIM 210. The Sociology of Deviance.  
(3-0-3)  
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)  
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)  
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.

(3-0-3)  
Prerequisites: SOC 101. 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. Criminology majors must take this course or CRIM 401. Equates with SOC 306 and SWK 306.

(3-0-3)  
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)  
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)  
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)  
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)  
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)  
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)  
This course focuses on the intersection of race, class and gender
membership with regard to treatment within the 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 WST 380 and SWK 381.

CRIM 385. Contemporary Legal Issues in the Criminal Justice System.
(3-0-3)
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)
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)
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.)
Unique topics and learning experiences that supplement regular course offerings. May be repeated in additional subject areas.

CRIM 401. Criminology.
(3-0-3)
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)
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)
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 decon-struct specific laws by analyzing the formation of criminal law from its incipient stages of development in American society. Equates with SOC 461.

CRIM 465. Environmental Sociology.
(3-0-3)
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.)
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)
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 experience 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)
Corequisite: CRIM 490. This course is required for all criminology majors.

CRIM 499C. Senior Criminology Capstone.
(3-0-3)
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.

DMS - Diagnostic Medical Sonography Courses

DMS 400. Introduction to Sonography.
(1-0-1)
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)
Corequisites: DMS 400 and 408. Restriction: admission into the diagnostic medical sonography program. An introduction to the performance of sonographic procedures. Emphasis is on equip-
ment 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)
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)
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)
Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 416A, 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)
Prerequisites: DMS 400, 402A and 408. Corequisites: DMS 410, 412A, 416A, 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)
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 and Instrumentation I.
(2-0-2)
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)
Prerequisites: DMS 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 428, 438, 441, 442A and 450. 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)
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.
(0-24-6)
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)
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 and Instrumentation II.
(2-0-2)
Prerequisites: 410, 412A, 416A, 418, 420 and 430. Corequisites: DMS 426A, 428, 438, 442A 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. Fours hours of didactic instruction per week for the first eight weeks of the semester.
DMS 442A. Scanning Techniques V.  
(0-2-1)  
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.  
(0-24-6)  
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.

DMS 470. Sonography Internship III.  
(0-40-4)  
Prerequisites: DMS 426A, 428, 438, 441, 442A and 450. Restriction: admission into the diagnostic medical sonography program. A continuation of technical and professional aspects of diagnostic sonography in a healthcare setting with emphasis on the role of the sonographer as an entry level practitioner. Forty hours of clinical experience per week for four weeks.

DMS 490. Sonography Internship IV.  
(0-32-3)  
Prerequisite: DMS 470. Corequisite: DMS 499C. Restriction: admission into the diagnostic medical sonography program. A continuation of technical and professional aspects of diagnostic sonography in a healthcare setting with emphasis on the role of the student as an independent entry level sonographer. Evaluation includes areas such as abdomen, superficial structures, gynecology and obstetrics. Thirty-two hours of clinical experience per week for four weeks.

DMS 499C. Seminar in Sonography.  
(3-0-3)  
Prerequisite: successful completion of previous DMS required courses listed in the curriculum. Corequisite: DMS 490. A review of diagnostic sonography content with consideration of clinical systems, sonographic patterns and technical aspects. Ten hours of didactic experience per week for four weeks. This course satisfies the integrated component for general education.

ESS - Earth Systems Science Courses

ESS 102. Dangerous Planet.  
(3-0-3)  
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 102. This course satisfies the NSC II requirement for general education.

ESS 108. Physical Geology.  
(3-2-4)  
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.

(1-4-3)  
Preservice teachers will learn the essential science concepts established by NSTA for teachers of grades K-8, and state and national standards for science, which includes topics in areas of geology (rocks, minerals, soils, volcanoes, earthquakes, structure of the earth, hydrogeology, geologic time, etc.), meteorology (sun as the source of energy, temperature, pressure, climate, 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.

ESS 199. Selected Topics.  
(1 to 6 hrs.)

ESS 201. Historical Geology.  
(2-2-3)  
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.)  
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.
(2-2-3)  
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.)

ESS 303. Planetary Geology.  
(3-0-3)  
Prerequisites: MATH 152 or higher, or an ACT math subscore of 22 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)  
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)  
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.)  
Prerequisite: ESS 239 or consent of department chair. Participation in supervised work experience in a professional environment.

ESS 340. Oceans and Atmospheres.  
(2-2-3)  
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, circulation patterns and seasons. Human influences and cultural effects on international environmental strategies will be explored.

ESS 350. Geomorphology.  
(2-2-3)  
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 362. Mineralogy.  
(2-4-4)  
Prerequisite: ESS 108. Physical and chemical properties of minerals; chemical, optical and x-ray methods of identification; systematic survey of common mineral groups.

ESS 363. Petrology.  
(2-4-4)  
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)  
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)  
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)  
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)  
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.)

ESS 410. Geological History of Plants and Animals.  
(2-2-3)  
Prerequisite: ESS 201. Evolutionary history of plants and animals throughout geological time.

ESS 413. Micropaleontology.  
(2-2-3)  
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)  
Development of geological thought; important persons and their contributions to our understanding of Earth.

ESS 425. Hydrogeology.  
(2-2-3)  
Prerequisites: ESS 108, ESS 201 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)
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.)
Prerequisite: ESS 339 or consent of department chair. Participation in supervised work experience in a professional environment.

ESS 440. Biogeochemical Cycles. (2-2-3)
Prerequisites: CIS 101 or PHYS 270 and junior or senior standing. 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)
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.)
Prerequisite: consent of instructor. Topic to be approved prior to registration.

ESS 499. Selected Topics. (1 to 6 hrs.)

ESS 499C. Earth System Science Senior Thesis. (3-0-3)
A directed research project will be designed, data will be collected and analyzed, in consultation with an 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. This course satisfies the integrative component for general education.

ESS 499D. C & I Action Research in ESS. (3-0-3)
Corequisite: EDSE 416. A culminating experience in which students will use curriculum and instruction action research in the Earth and space sciences to develop, teach and reflect upon a standards-based unit plan. This course satisfies the integrative component for general education.

ECON 101. Introduction to Economics. (3-0-3)
This course is an introduction to economics and the economy. Like any science, economics has both content and methodology. The content is the set of human or social actions and interactions that make up the economy. The methodology is "the economic way of thinking," the set of concepts, principles and perspectives that make up the discipline of economics. Students will learn how the discipline of economics helps them to understand the economy and make better decisions. The objective of the course is to develop a working understanding of some of the issues and economic concepts that everyone needs in order to fully participate in American life. The course will introduce students to both microeconomics and macroeconomics. This course provides fundamental material on the subject matter, and is usually taken as a first course in economics. This course satisfies the SBS II requirement for general education.

ECON 102. Economic History of the United States. (3-0-3)
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 201. Principles of Macroeconomics. (3-0-3)
An examination of what determines the total output of goods and services, the rate of unemployment, the price level, the rate of inflation, rates of interest and foreign exchange rates within a mixed price-market economic system.

ECON 202. Principles of Microeconomics. (3-0-3)
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.

ECON 302. Labor Economics. (3-0-3)
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.

ECON 305. Comparative Economic Systems. (3-0-3)
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 315. Resource Economics. (3-0-3)
Prerequisite: ECON 101 or higher. A study of how economic behavior influences the supply of and demand for natural resources. The course examines the manner of production, factor markets and degrees of competition among resources. Also, the effects of government regulation and market interventions are analyzed.

ECON 339. Cooperative Education III. (1 to 8 hrs.)
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 (ECON 339/439) available for option credit.
ECON 341. Public Finance.  
(3-0-3)  
Prerequisite: ECON 101 or higher. Public expenditures; public revenue; taxation; public credit; financial administration of government.

ECON 342. Money and Banking.  
(3-0-3)  
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)  
Prerequisites: ECON 202 and any one of the following: MATH 123, MATH 131, MATH 135, 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)  
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)  
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.)  
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)  
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)  
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)  
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.)  
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 senior level status. Maximum of three hours of cooperative education credit (ECON 339/439) available for option credit.

(3-0-3)  
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)  
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)  
Prerequisite: BBA 315. 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.)  
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.

ECON 499. Selected Workshop Topics.  
(1 to 4 hrs.)  
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.

EDAH - Education (Adult and Higher) Courses

EDAH 094. ACT Preparation.  
(1-0-1)  
Prerequisite: must be a full-time student 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)  
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.)
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.)
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)
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 Early Childhood Educators. (3-0-3)
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.)
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.

EDEC 253. Child Growth and Development. (2-2-3)
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)
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)
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.)
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.)
Continuation of EDEC 199.

EDEC 416. Infant/Toddler Program Planning. (3-1-3)
Prerequisites: EDEC 253, EDEE 305 and IECE 311. Current programs, techniques, environments and research relating to infant stimulation. Emphasis on home intervention, theory and practices. Completion of the required field experience is an integral part of this course.

EDEC 418. Preschool Program Planning. (3-1-3)
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.)
Prerequisites: IECE 301, IECE 345, EDEC 416 and EDEC 418. Corequisite: EDEC 499C. Restriction: senior status in an Early Childhood Development Program. 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.)
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)
Corequisite: EDEC 425. Restriction: senior status in Early Childhood Development Program. 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.

EDEM - Education (Early Elementary and Middle Grades) Courses

EDEM 330. Foundations of Reading. (2-2-3)
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.

EDEE 499C. Seminar in Effective Teaching.
(3-1-3)
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.

EDEE - Education (Early Elementary/ P-5) Courses

(3-0-3)
Prerequisites: EDF 207 and 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)
Prerequisite: MATH 231. Corequisites: SCI 490 and EDUC 482. Requires TEP admission. An exploration of elementary mathematics instruction methods, assessment and materials. Emphasis is on connecting physical models, appropriate spoken dialog and mathematics symbols to help children construct an understanding of essential number concepts. Fifteen hours of field experiences in P-5 are an integral part of this course.

EDEE 322. Teaching Social Studies in the Early Elementary Grades.
(2-2-3)
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)
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)
Prerequisite: 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)
Prerequisite: EDEE 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.)
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)
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 website. Course provides diagnostic comprehension, and reading rates are stressed.

EDEL 097. Strategic Reading II.
(3-0-3)
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 website. Course provides diagnostic comprehension, and reading rates are stressed.

EDEL 199. Workshop.
(1 to 3 hrs.)
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.)  
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 enrolled in Child Development Program training.

**EDEL 276. Independent Study.**  
(1 to 3 hrs.)  
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)  
*Corequisites: P-5: EDSP 367 and EDEM 330; 5-9: EDMG 347 and 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.

**EDF 100. Introduction to Education.**  
(3-0-3)  
An introduction to American schooling for students considering a career in teaching.

**EDF 207. Foundations of Education.**  
(3-0-3)  
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 the course.

**EDF 211. Human Growth and Development.**  
(3-0-3)  
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, Assessment and Diversity.**  
(3-0-3)  
*Prerequisites: admission to TEP and EDF 211.* This course considers the principles of learning and cognition, motivation, individual differences and adjustment of students, especially as they are applied to the classroom. This course includes study related to culturally diverse and exceptional populations, including significant study of theoretical frameworks and examples of ways in which schools and societies maintain oppression of particular learner groups while privileging others. 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, focusing on ways in which educators can advocate for equity in education via effective use of principles of learning and assessment. Field experiences in varied school settings are required and considered to be a foundational element of the course, as this advances candidates’ applied and reflective understanding of the rich diversity represented in social groups and school organizations in America.

**EDF 322. Gender and Education.**  
(3-0-3)  
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)  
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)  
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)  
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)  
*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.
(2-2-3)
Prerequisites: EDF 207, EDF 211, and 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)
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. EDMG 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)
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)
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 grades 5-9. Completion of the required field experience is an integral part of this course.

EDMG 343. Teaching Language Arts in Middle Grades.
(3-0-3)
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)
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.)
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.)
An independent study providing students the opportunity 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.

EDUC - Education (Professional) Courses

EDUC 140. Educator Preparation Field Experiences I.
(1-0-1)
Prerequisite: Completion of 12 credit hours. This course is designed for teacher preparation candidates who need extended field experience hours. The course increases awareness of the many facets of teaching through active engagement and participation in a variety of pre-school through grades 12 (PK-12) school settings. One - forty clock hours of extended field experiences are required for this course at Level I experiences defined by the Educational Service Unit at MSU. This course is pass/fail.

(3-0-3)
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 240. Educator Preparation Field Experiences II.
(1-0-1)
Prerequisite: Completion of 12 credit hours. This course is designed for teacher preparation candidates who need extended field experience hours. The course increases awareness of the many facets of teaching through active engagement and participation in a variety of pre-school through grades 12 (PK-12) school settings. 1-40 clock hours of extended field experiences are required for this course at Levels II and III experiences defined by the Educational Service Unit at MSU. This course is pass/fail.

EDUC 476. Reading in the Secondary School.
(2-2-3)
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)  
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.

EDSE - Education (Secondary) Courses

EDSE 276. Independent Study.  
(1 to 3 hrs.)  
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)  
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)  
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.)  
Investigation of specific problem areas in the field of study. May be repeated in additional subject areas.

EDSE 416. Clinical Practice.  
(12-0-12)  
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.

(1 to 3 hrs.)  
Independent research study of a professional nature. Conferences with instructor by arrangement. Maximum of six semester hours may be earned under this course number.

(3-0-3)  
Prerequisite: admission to the 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)  
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.)  
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)  
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)  
Involves the student in on-site experiences in a variety of schools, institutions, and agencies providing services to the trainable mentally disabled.

EDSP 276. Independent Study.  
(1 to 3 hrs.)  
Independent study of a professional problem in special education.

EDSP 320. Introduction to Corrective Speech.  
(3-0-3)  
Introductory course in speech correction for classroom teacher.

(2-2-3)  
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)  
Prerequisites: admission to TEP; EDEM 330, EDSP 230, EDSP 350, EDSP 356, EDSP 360 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
EDSP 355: Teaching Students with LBD.

(2-2-3)
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.


(2-2-3)
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)
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)
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)
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)
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)
Prerequisite: EDSP 230 and admission to the TEP. Corequisite: 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)
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)
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)
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)  
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)  
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)  
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)  
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.)  
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.)  
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.)  
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, and approval of University Teacher Education Council. Placement is in public school setting with students with moderate and severe disabilities. Development of a new teacher portfolio that documents mastery of the performance standards and criteria for teachers of students with moderate and severe disabilities. Application made through the director of student teaching.

EDSP 450. Practicum in Community Support.  
(0-8-4)  
Petition 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.)  
Independent research study of a professional problem. Conferences with instructor by arrangement.

ENG - English Courses

ENG 090. Developmental Writing.  
(3-0-3)  
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)  
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)  
Prerequisite: An ACT subscore of 18 in English or successful completion of ENG 099. This course is designed to develop students’ skills in reading introductory college-level texts with comprehension and critical awareness; writing effective academic prose; making use of current technologies to locate information relevant to select topics; and making effective and appropriate use of a modest number of sources in expository and persuasive/argumentative essays. This course satisfies the required core-Writing I for general
ENG 120. Approaches to Literature.
(3-0-3)
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, including at least three national groups outside Britain and the United States, with emphasis on ways of reading and understanding literary texts and genre distinctions. This course satisfies the HUM I requirement for general education.

ENG 200. Writing II.
(3-0-3)
Prerequisites: ENG 100. An exploration of diverse texts with an emphasis on articulating written responses to these works from interdisciplinary perspectives. Building on information-literacy skills developed in ENG 100 and other general education courses, students read, analyze and evaluate diverse cultural texts from different perspectives to find connections across the natural sciences, the social and behavioral sciences and the humanities. This course satisfies the core-writing II requirement for general education.

ENG 205. Language: Culture and Mind.
(3-0-3)
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)
Prerequisites: an ACT score of 18 in English and in reading or grade of "C" or better in ENG 100 and EDEL 097. Comparative study of world literature to 1650 in English or English translation, with an emphasis on various genres. Equates with IST 211.

ENG 212. Introduction to World Literature II.
(3-0-3)
Prerequisites: an ACT score of 18 in English and in reading or grade of "C" or better in ENG 100 and EDEL 097. Comparative study of world literature since 1650 in English or English translation, with an emphasis on various genres. Equates with IST 212.

ENG 280. Introduction to Teaching English in Secondary Schools
(3-0-3)
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 293. Introduction to Creative Writing.
(3-0-3)
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 nonfiction and drama.

ENG 300. Introduction to the Study of Literature in English.
(3-0-3)
Prerequisite: ENG 100 (or equivalent). Study of literary terminology, research, theory, and documentation techniques, for all English majors. Strongly recommended in preparation for any upper-level literature courses.

ENG 305. Introduction to Linguistics.
(3-0-3)
Introduction to the major areas of contemporary linguistics, including phonetics, phonology, morphology and syntax.

ENG 311. Global English Literature.
(3-0-3)
Prerequisite: ENG 100 (or equivalent). Introduction to English literature produced outside of a British or American 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)
Prerequisite: ENG 100 or equivalent. Study of selected women writers, with attention to feminist theory and practice and the development of a feminist literary canon. Equates with WST 320.

ENG 331. British Literature to 1789.
(3-0-3)
Prerequisite: ENG 100 or equivalent. Survey of selected texts representing the historical development of British literature and culture from the Anglo-Saxon period to the late eighteenth century.

ENG 332. British Literature since 1789.
(3-0-3)
Prerequisite: ENG 100 or equivalent. Survey of selected texts representing the historical development of British literature and culture from the late eighteenth century to the present.

ENG 341. American Literature to 1865.
(3-0-3)
Prerequisite: ENG 100 or equivalent. Survey of selected texts representing the historical development of American literature and culture from its colonial beginnings to 1865.

ENG 342. American Literature since 1865.
(3-0-3)
Prerequisite: ENG 100 or equivalent. Survey of selected texts representing the historical development of American literature and culture from 1865 to present.

ENG 344. The Short Story and the Novel.
(3-0-3)
Prerequisite: ENG 100 or equivalent. Study of representative forms of the short story and the novel.
(3-0-3)  
Prerequisite: ENG 100 or equivalent. Study of representative writers, texts, movements and themes in African-American literature and culture.

ENG 360. Appalachian Literature.  
(3-0-3)  
Prerequisite: ENG 100 or equivalent. Study of representative Appalachian writers, texts, literary movements and themes.

ENG 365. Literature of the South.  
(3-0-3)  
Prerequisite: ENG 100 or equivalent. Study of representative Southern writers, texts, literary movements and themes.

ENG 381. Teaching Literature in Secondary Schools.  
(3-0-3)  
Prerequisites: admission to TEP, completion of ENG 280, and six hours of 300-level literature courses. This course focuses on preparing secondary English teaching candidates to teach literature in the high school classroom. Field experience required.

ENG 382. Teaching Writing in Secondary Schools.  
(3-0-3)  
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)  
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)  
Prerequisites: successful completion of the general education writing requirements. 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)  
Prerequisite: ENG 200 or equivalent. Extensive reading and writing of academic prose and long essays based on scholarship.

ENG 392. Teaching Writing in Elementary and Middle Schools.  
(3-0-3)  
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)  
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)  
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)  
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)  
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)  
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)  
Prerequisite: ENG 100 or equivalent. Study of literature and sexuality, with an emphasis on the formation of a gay and lesbian literary canon. Equates with WST 394.

ENG 399. Special Courses.  
(3-0-3)  
Prerequisite: ENG 100 or equivalent. Study of specialized topics variable by semester and intended to enhance regular course offerings.

ENG 400. Studies in English for Teachers.  
(3-0-3)  
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)  
Prerequisite: ENG 305 or 315. A linguistic approach to the study of meaning in language.
ENG 404. Advanced Syntax.  
(3-0-3)  
Prerequisite: ENG 305 or 315. Advanced study of the structure of sentences, including current theoretical perspectives.

ENG 422. Studies in American Literature to 1900.  
(3-0-3)  
Prerequisite: ENG 341 or ENG 342. Study of representative American writers, texts, literary movements, literary forms and themes from the colonial period to 1900.

(3-0-3)  
Prerequisite: ENG 342. Study of representative American writers, texts, literary movements, literary forms, and themes, 1900-1965.

(3-0-3)  
Prerequisite: ENG 342. Study of representative American writers, texts, literary movements, literary forms and themes, 1965 to present.

ENG 432. The British Novel.  
(3-0-3)  
Prerequisite: ENG 331 or 332. Study of representative British novels and the development of the genre from its beginnings to the present.

ENG 435. Shakespeare.  
(3-0-3)  
Prerequisite: ENG 331 or consent of instructor. Study of Shakespeare’s plays and poetry in historical and critical contexts.

ENG 436. The English Renaissance.  
(3-0-3)  
Prerequisite: ENG 331. Study of representative British writers, texts, literary movements, literary forms and themes, 1500 to 1600.

ENG 441. Restoration and Eighteenth Century British Literature.  
(3-0-3)  
Prerequisite: ENG 331. Study of representative British writers, texts, literary movements, literary forms and themes, 1600 to 1798.

ENG 442. Romantic Writers.  
(3-0-3)  
Prerequisite: ENG 332. Study of representative British writers, texts, literary movements, literary forms and themes, 1789-1832.

ENG 443. Victorian Writers.  
(3-0-3)  
Prerequisite: ENG 332. Study of representative British writers, texts, literary movements, literary forms and themes, 1832-1901.

ENG 444. British Literature since 1901.  
(3-0-3)  
Prerequisite: ENG 332. Study of representative British writers, texts, literary movements, literary forms and themes, 1901 to the present.

ENG 453. Modern Drama.  
(3-0-3)  
Prerequisite: ENG 300 or consent of instructor. Study of representative dramas and the development of the genre from the advent of realism to the present.

ENG 455. Early Dramatic Literature.  
(3-0-3)  
Prerequisite: ENG 300 or consent of instructor. Study of representative dramas and development of the genre from the Greeks to the mid-nineteenth century.

ENG 463. American Fiction.  
(3-0-3)  
Prerequisite: ENG 341 or 342. Study of representative American fiction from its beginnings to the present.

ENG 466. American Poetry.  
(3-0-3)  
Prerequisite: ENG 341 or ENG 342. Study of representative American poetry from its beginnings to the present.

ENG 470. Film and Literature.  
(3-0-3)  
Prerequisite: ENG 300 or consent of instructor. Study of the relationship between literature and film.

ENG 476. Directed Studies.  
(1 to 3 hrs.)  
Prerequisite: consent of instructor and department chair. This course is an independent study in English for the undergraduate English 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)  
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)  
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)  
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)  
Prerequisite: ENG 300 or consent of instructor. Intensive study of one or more major figures in literature in English.

ENG 499C. Senior Seminar in English.  
(3-0-3)  
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.

FLM - Film Courses

FLM 170. Introduction to Film.  
(3-0-3)  
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)  
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)  
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)  
Prerequisite: FLM 170. A survey of influential film theories.

FIN - Finance Courses

(3-0-3)  
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 and historical differences existing in monetary use, acceptance, value and impact on standard of living. As a result students will witness the ever changing role of money in a society and how that unique dynamic can influence individuals and groups around the world. This course will be relevant to undergraduates majoring in any field, while at the same time exposing them to a critical perspective that is particular to the social sciences. This course satisfies the SBS II requirement for general education.

FIN 199. Selected Workshop Topics.  
(1 to 4 hrs.)  
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)  
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)  
Planning personal finance, financial statements, budgeting, managing financial and non-financial assets, taxes, insurance and estate planning. This course satisfies the SBS I requirement for general education.

FIN 325. Bank Management.  
(3-0-3)  
Prerequisite: ACCT 281, ECON 101 or higher. Organization and operation of the commercial bank.

FIN 339. Cooperative Education III.  
(1 to 8 hrs.)  
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)  
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)  
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 and owner’s equity.

(3-0-3)  
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)  
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)  
Prerequisite: FIN 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)  
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)  
Prerequisite: FIN 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)  
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)  
Prerequisites: FIN 360. Covers insurance topics such as legal aspects, life and health, and property and liability, and business risk management.

FIN 399. Selected Workshop Topics.  
(1 to 4 hrs.)  
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)  
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.)  
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)  
Prerequisite: FIN 360. Includes intensive study of capital budgeting, cost of capital, capital structure and special topics in finance.

FIN 472. Portfolio Analysis.  
(3-0-3)  
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.)  
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.

(3-0-3)  
Prerequisite: FIN 360. This course helps students develop financial management skills applicable to healthcare organizations, especially hospitals. The course begins with the introduction of the U.S. healthcare delivery system and the the financial relationships among various healthcare organizations. Upon understanding of the healthcare delivery system, the course proceeds with important aspects of financial management, such as financial strength analysis, capital cycle, capital financing and structure, and capital budgeting and allocation. Specifically, these aspects will be examined under the circumstance of hospital financial management. Through case studies, in-class discussions and presentations, students will learn to apply financial management practices in healthcare organizations and be aware of financial challenges in the dynamic healthcare industry.

(3-0-3)  
Prerequisite: FIN 360 or consent of instructor. Includes the study of international finance markets, investments and multinational corporations with emphasis on the operations of the multinational firm, foreign exchange and trade, banking and investment, and risk.

FIN 486. Student-Managed Investment Fund.  
(3-0-3)  
Prerequisites: FIN 360 and 373 or consent of instructor. Students manage a real portfolio of investments in the stock market. Investment money belongs to the MSU Foundation Inc., and other outside investors. Students conduct securities analysis and make portfolio management decisions. All investment decisions are made by the students. The course instructor serves as a moderator only.

FIN 490. Seminar in Financial Theory and Practice.  
(3-0-3)  
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.)  
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)
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)
Emphasis on developing communicative skills: listening, speaking, reading and writing. Basic grammar and orientation to French culture. Video and audio components. Computer enhanced instruction. Online workbook and resources. This course satisfies the HUM II requirement for general education.

FRN 102. Beginning French II. (3-0-3)
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)
Prerequisite: FRN 102. Continuation of FRN 102. Increased emphasis on interactive language and grammatical competency.

FRN 202. Conversation and Composition. (3-0-3)
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)
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)
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)

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. 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)
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)
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)
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)
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)
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)
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.)
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.)
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)
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.

FYS - First Year Seminar Course

FYS 101. First Year Seminar.
(3-0-3)
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)
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 102. Dangerous Planet.
(3-0-3)
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 102. This course satisfies the NSC II requirement for general education.

GEO 103. Physical Geography.
(3-0-3)
Physical elements of the earth and their distribution; weather, climate, landforms, earth materials, water resources and natural vegetation analyzed and interpreted as elements of human habitation; correlated field trips and laboratory studies. This course satisfies the NSC II requirement for general education.

GEO 201. Map Interpretation and Analysis.
(2-1-3)
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)
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)
Major land-use regions of the United States and Canada, their physical and cultural landscapes.

GEO 245. Natural Landscapes of Appalachia.
(3-0-3)
Description and interpretation of the Appalachian mountain region in the context of the physical and ecological processes involved in shaping the terrain and forest biomes, including transformations that have taken place since European settlement as a result of human activity. This course satisfies the NSC II requirement for general education.

GEO 300. World Geography.
(3-0-3)
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)
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)
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)
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)
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)
A survey of urban evolution, urbanization, economic structure, land use and urban planning.

GEO 316. Dynamic Landscapes and Land Use.
(3-0-3)
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)
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)
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)
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)
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)
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)
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)
Prerequisite: GEO 103 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)
History of map-making; properties and qualities of maps; characteristics of map projections; construction of basic projections; and basic techniques of mapping spatial data.

GEO 351. Geographic Information Systems.
(3-0-3)
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)
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)
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)
Prerequisite: GEO 103 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)
Prerequisite: GEO 103 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 370. Geography of World Religions.
(3-0-3)
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)
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)
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)
Prerequisite: GEO 103. 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)
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 405. Conservation of Natural Resources.  
(3-0-3)  
Natural resources basic to human welfare; emphasis on lands, water, minerals, forests and wildlife, including their interrelationships. Field trips are required.

GEO 476. Special Problems.  
(1 to 3 hrs.)  
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 hrs.)  
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.

GER - German Courses

GER 101. Beginning German I.  
(3-0-3)  
Fundamentals of structure: basic vocabulary, reading, writing, pronunciation and some conversation.

GER 102. Beginning German II.  
(3-0-3)  
A continuation of GER 101.

GER 201. Intermediate German I.  
(3-0-3)  
A review of grammar and pronunciation, with emphasis on reading of contemporary writings.

GER 202. Intermediate German II.  
(3-0-3)  
Prerequisite: GER 201. A continuation of GER 201.

GER 203. Expository German.  
(3-0-3)  
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)  
Further development of language skills. Extensive experience in the language laboratory is required.

GER 302. Composition and Conversation.  
(3-0-3)  
Prerequisite: GER 301. A continuation of GER 301 with greater emphasis on stylistics.

GOVT - Government Courses

GOVT 102. Introduction to Politics.  
(3-0-3)  
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 sub-fields 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)  
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)  
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)  
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)  
A study of the nature, organization, powers and functions of American state and local governments.

GOVT 262. U.S. Foreign Policy.  
(3-0-3)  
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)  
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)  
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 underdevelop-
ment, state autonomy and development strategies.

**GOVT 302. Politics of Culture.**
(3-0-3)
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)
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.

**GOVT 304. Politics of Transition.**
(3-0-3)
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)
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)
Prerequisites: GOVT 180 and 289. A study of the political ideas of ancient, medieval and modern political thinkers including Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Mill and Marx.

**GOVT 314. American Political Thought.**
(3-0-3)
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)
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 political action.

**GOVT 317. Feminist Political Thought.**
(3-0-3)
Prerequisites: GOVT 180 and 289. History and development of feminist political thought. Perspectives include those of Fuller, Millet, Collins, MacKinnon and Irigaray.

**GOVT 318. Twentieth Century Political Thought.**
(3-0-3)
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, postmodernism and conservatism.

**GOVT 321. Constitutional Law: Governmental Powers.**
(3-0-3)
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)
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)
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)
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)
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.

**GOVT 330. Parliamentary Democracies.**
(3-0-3)
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)
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.

**GOVT 332. Politics of Latin America and the Caribbean.**
(3-0-3)
Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in Latin American/Caribbean politics. Includes issues of debt, development and democratization.
GOVT 333. Politics of Sub-Saharan Africa. (3-0-3)
Prerequisites: GOVT 230 and 289. Analysis of major themes and cases in African politics. Includes issues of debt, development and democratization.

GOVT 334. Russia and Eastern European Governments. (3-0-3)
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.

GOVT 337. Politics of Asia. (3-0-3)

GOVT 342. The American Presidency. (3-0-3)
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)
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. Kentucky Government. (3-0-3)
Prerequisite: GOVT 289. A study of the nature, organization, powers and functions of Kentucky state government.

GOVT 347. American Public Policy. (3-0-3)
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 their nature, formulation, implementation and impact.

GOVT 349. African-American Politics. (3-0-3)
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)
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)
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)
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)
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.

GOVT 356. United Nations and World Organizations. (3-0-3)
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 present world organizations.

GOVT 360. Current World Problems. (3-0-3)
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.

GOVT 364. International Relations. (3-0-3)
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.

GOVT 366. Politics of International Economic Relations. (3-0-3)
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."

GOVT 368. Human Rights and Global Justice. (3-0-3)
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.

GOVT 372. Political Geography. (3-0-3)
Prerequisite: GOVT 289. A study of the principles and concepts of
political geography and their application to an understanding of political phenomenon worldwide.

**GOVT 373. Introduction to Women's Studies.**  
(3-0-3)  
Prerequisite: completion of the (nine hour) general education requirement in English and literature or consent of department. 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.

**GOVT 389. Honors Seminar.**  
(3-0-3)  
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 399. Selected Topics in Government.**  
(3-0-3)  
Prerequisite: GOVT 289. Special courses which supplement regular course offerings. May be repeated if the subtitle indicates a different course is being offered.

**GOVT 410. Seminar in American Politics.**  
(3-0-3)  
This course is an upper division undergraduate survey of the Constitution, institutions, and politics of American government through an examination of major works across the political science literature.

**GOVT 420. Seminar in International Relations.**  
(3-0-3)  
This course is an upper division undergraduate survey of the international relations field through an examination of major works across the political science literature. Students will undergo a study of international relations theory and practice, concepts of power and its application, machinery of foreign policy making and implementation, world politics and law, and the world community.

**GOVT 430. Seminar in Comparative Politics.**  
(3-0-3)  
This course is an upper division undergraduate survey of the discipline subfield of comparative politics - its dominant questions, theories, and research methods - by way of an intensive study of the countries and the politics of a particular geographic regions.

**GOVT 440. Seminar in Political Theory.**  
(3-0-3)  
This course is an upper division undergraduate survey of the fundamental questions of political life through an examination of major works across the tradition of political philosophy: ancient, medieval, modern and contemporary.

**GOVT 451. Seminar in Bureaucracy and Public Management.**  
(3-0-3)  
This course provides an advanced understanding of the concepts and principles of bureaucracy and public management, with special focus on bureaucratic policy, executive institutions and administrative agencies responsible for the formation and execution of public policy.

**GOVT 452. Seminar in Public Law.**  
(3-0-3)  
This upper-division undergraduate survey course will use major works in the political science and law literature for advanced study of the dominant questions, theories and research methods of the discipline sub-field of public law.

**GOVT 476. Special Problems in Government.**  
(1 to 3 hrs.)  
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.**  
(15 hrs.)  
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.)  
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.

**GOVT 496. Frankfort Legislative Internship Program.**  
(15 hrs.)  
Prerequisite: prior approval of department is required. Five months of work study experience with the Kentucky General Assembly 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.)  
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 government.

**GOVT 499C. Senior Seminar.**  
(3-0-3)  
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.

**HLTH - Health Courses**

**HLTH 151. Wellness: Theory to Action.**  
(3-0-3)  
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)*  
Safety education and first aid care for victims of accident or sudden illness.

**HLTH 205. Psychological Health.**  
*(3-0-3)*  
Health psychology: foundations, biopsychosocial factors and psychoneuroimmunology perspectives.

**HLTH 206. Principles of Nutrition.**  
*(3-0-3)*  
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)*  
*Prerequisites: HLTH 151.* 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)*  
*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)*  
*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)*  
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)*  
*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)*  
*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)*  
*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)*  
*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)*  
*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)*  
*Prerequisite: junior or senior standing.* Analysis of the selection, purchase, and use of various health-related products, services, insurance policies, and/or healthcare facilities which impact individual health throughout the life span.

**HLTH 435. Health Counseling.**  
*(3-0-3)*  
*Prerequisite: junior or senior standing.* Focuses on conceptual framework and practical health counseling strategies and skills used in a variety of settings to help individuals initiate and maintain health-orientated behavior changes. Appropriate for individuals who plan to work in schools, human service agencies, private practices, healthcare organizations, business, or other environments which work with clients interested in changing life-style health behaviors.

**HLTH 470. Practicum.**  
*(0-24-15)*  
*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)*  
*Prerequisites: senior standing, 2.5 or above overall and program content GPA.* Practical full-time experience under professional supervision in a selected and approved setting. Students taking HLTH 471 must meet with their advisor and attend a mandatory meeting regarding the practicum in the 10th week of the semester prior to enrolling in HLTH 471. Students should contact their advisor for meeting dates and times.

**HLTH 475. The School Health Program.**  
*(3-0-3)*  
All aspects of elementary and secondary level school health: philosophy, organization and administration, environment, services, education, evaluation and the school age child.
HLTH 477. Field Experience in Health.  
(0-6-3)  
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.)  
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 to 3 hrs.)  
Prerequisite: senior standing. Intensive study of approved, specific health problems, under direction of instructor.

HLTH 499C. Senior Seminar in Health Promotion.  
(3-0-3)  
Prerequisite: senior standing in health promotion. This course is best when taken prior to HLTH 471; however, students may take HLTH 499C and HLTH 471 concurrently with permission from their advisor. 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 471 practicum. This course satisfies the integrative component in health promotion for general education.

HPE - Health and Physical Education Courses  

HPE 160. Foundations of Health and Physical Education.  
(3-0-3)  
History, principles, philosophy, outcomes, standards and assessments 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)  
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)  
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)  
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)  
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 this course.

HPE 304. Methods of Teaching Secondary Health.  
(2-2-3)  
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)  
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. This course satisfies the integrative component for general education.

HSM - Health Systems Management Courses  

(3-0-3)  

HST - History Courses  

(3-0-3)  
This course will historically examine American social movements in the 20th century and their impact on our current understandings 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 struggles over issues of equality and social change. This course satisfies the SBS I requirement for general education.

HST 110. World History since 1945. (3-0-3)
This course will examine the history of our world since 1945. Using a variety of approaches, including narrative reasonings, historical primary sources and film, this course will introduce students to cultures across the world, helping them to construct a global historical narrative. This course satisfies the HUM II requirement for general education.

HST 111. World History through Film. (3-0-3)
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, scholarly 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. This interdisciplinary course satisfies the HUM II requirement for general education.

HST 260. American History to 1865. (3-0-3)
Analysis of historic themes and issues from the Age of Discovery through the Civil War.

HST 261. American History since 1865. (3-0-3)
Enter level course using historical and literary texts and multimedia approaches to familiarize students with the nation’s social, political, economic and cultural development.

HST 270. World History to 1500. (3-0-3)
A study of the history, culture and ideas of early world cultures, beginning with the oldest civilizations of the Ancient Near East and ending with the Age of Exploration and Colonization. This course examines the major geographical areas thematically, concentrating on the impact of the major world religions and the relationships between peoples as well as the political, economic, social and technological development of these world religions.

HST 271. World History since 1500. (3-0-3)
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 IST 201.

HST 300. Practicing History. (3-0-3)
Prerequisite: consent of department chair. Entry level course for majors and minors. Students complete book reviews, automated library searches, discuss career options, learn about historiography and use historical methods in writing and oral communication. Student portfolios are initiated in this class.

HST 301. Colonial America. (3-0-3)
Critical analysis of events from the Age of Discovery to the Revolutionary War.

HST 302. The Early Republic. (3-0-3)
Critical analysis of events from the American Revolution to the Jeffersonian era.

HST 303. Antebellum America. (3-0-3)
Analysis of national, political and social movements when America sought compromise but found Civil War.

HST 304. The Civil War and Reconstruction. (3-0-3)
The role of the southern states in the rebirth of the American nation.

HST 305. America 1877-1939. (3-0-3)
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.

HST 306. America 1939-present. (3-0-3)
America from World War II to the end of the Cold War. Emphasis is placed on social conditions and issues.

HST 311. Ancient History. (3-0-3)
The earliest civilizations of the Nile and the Fertile Crescent and their impacts on western civilization.

HST 312. Medieval Europe. (3-0-3)
Western history from the collapse of Rome to the Renaissance of the 16th century.

HST 313. The Renaissance and Reformation. (3-0-3)
A social and intellectual history of the beginning of modern Europe.

HST 314. Nineteenth Century Europe. (3-0-3)
The politicians, nationalistic trends and unification movements leading to World War I. Equates with IST 359.

HST 315. Twentieth Century Europe. (3-0-3)
Detailed survey of World War II, the Cold War and contemporary events. Equates with IST 361.
HST 316. England to 1688.  
(3-0-3)  
The political, social, and economic institutions of England through the fall of the Puritan Commonwealth. Equates with IST 351.

HST 317. England since 1688.  
(3-0-3)  

HST 318. Europe's Eastern Frontier to 1709.  
(3-0-3)  
The story of Russia from Kievan times to the overthrow of the Romanov dynasty. Equates with IST 353.

HST 319. The Russian Empire.  
(3-0-3)  
Detailed account of Soviet Russia from revolution through the end of the Cold War. Equates with IST 354.

HST 320. Modern Germany.  
(3-0-3)  
History of Germany from unification to the present in the context of European and world events. Equates with IST 355.

HST 321. The Middle East.  
(3-0-3)  
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.

HST 322. African History.  
(3-0-3)  
Focus on early African states, the slave trade era, the rise and fall of imperial empires and post independence events. Equates with IST 370.

HST 323. Traditional China.  
(3-0-3)  

HST 324. Modern China.  
(3-0-3)  
Survey of Chinese history since the 19th century. Equates with IST 372.

(3-0-3)  
Survey of Japanese history from the beginning of its civilization to its rise as a world power. Equates with IST 373.

HST 326. Latin American History.  
(3-0-3)  
The Indian background, the rise and fall of the Iberian empires and major events since independence. Equates with IST 379.

HST 327. History of Canada.  
(3-0-3)  
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 IST 331.

(3-0-3)  
This course examines a specific topic not part of the regular course offerings with the intent to capitalize on the research interests of both students and individual professors. The emphasis will be in the scholarship of the topic with accompanying readings and writings as appropriate to the subject. Specific content varies and may cover any part of American history. The course may be repeated if content differs.

HST 341. The American Frontier.  
(3-0-3)  
The westward movement and the shaping of American life and institutions.

HST 342. Native American History.  
(3-0-3)  
Historical development of native Americans from their entrance into this hemisphere to current conditions and issues.

(3-0-3)  
Religion’s interaction with facets of American society. The role of religion in molding the nation.

HST 344. African American History.  
(3-0-3)  
African-American history from the origins of slavery to contemporary times.

(3-0-3)  
Experiences and perceptions of women throughout American history. Significant roles and issues are emphasized. Equates with WST 313.

HST 346. United States Foreign Relations.  
(3-0-3)  
Survey of foreign relations of the United States from its conception to United Nations involvement.

HST 347. American Military History.  
(3-0-3)  
Origins, course and effects of American involvement in war.

HST 348. America in the Nuclear Age.  
(3-0-3)  
This course examines the history of the United States since the end of World War II. The course integrates cultural, social and economic developments in the United States during the Nuclear Era against the backdrop of the ideological Cold War struggles between communism and anticommunism.

HST 349. American Cultural Theory.  
(3-0-3)  
Survey of American intellectual heritage from Puritanism to the contemporary era.
HST 351. Vietnam and Watergate.  
(3-0-3)  
Study of the Vietnam War and the Watergate scandal in the context of policy developments in America since 1945.

HST 352. History of Appalachia.  
(3-0-3)  
A social, economic and political history of the people and the events of the Appalachian Mountains.

HST 353. History of Kentucky.  
(3-0-3)  
Colonial birth to the creation of the Commonwealth with emphasis on constitutional and social development.

HST 354. The Old South.  
(3-0-3)  
A study of southern sectionalism and the ongoing development of regional characteristics.

HST 355. The New South.  
(3-0-3)  
This course examines the development of the South since the end of the Civil War in 1865. It considers the effects of abolition of slavery, segregation, the Civil Rights movement and the rise of the urban South.

HST 356. Struggles for Reform in America.  
(3-0-3)  
This course examines both popular and governmental efforts at attaining social and economic reform in the United States from the founding of the republic through the progressive era, the "Great Society," and contemporary America. Students will consider the concept and nature of reform from various social and political contexts.

HST 357. United States Urban History.  
(3-0-3)  
This course examines the development of cities in the United States since the end of the Civil War in 1865. It considers the effects of immigration, industrialization, the rise of modern cities and urban politics and issues.

HST 370. Seminar in European History.  
(3-0-3)  
This course examines a specific topic not part of the regular course offerings with the intent to capitalize on the research interests of both students and individual professors. The emphasis will be in the scholarship of the topic with accompanying readings and writings as appropriate to the subject. Specific content varies and may cover any part of Europe and any chronological era. The course may be repeated if content differs.

(3-0-3)  
This course examines a specific topic not part of the regular course offerings with the intent to capitalize on the research interests of both students and individual professors. The emphasis will be in the scholarship of the topic with accompanying readings and writings as appropriate to the subject. Specific content varies and may cover any part of world history and any chronological era. The course may be repeated if content differs.

HST 372. Revolutionary Europe.  
(3-0-3)  
History of Europe from the Age of Absolutism to the collapse of the Napoleonic Empire. Equates with IST 358.

HST 373. The Cold War in Eastern Europe.  
(3-0-3)  
This course serves as an introduction into the topic of the Cold War in Eastern Europe. The topics selected allow students to gain an understanding of the major political events, economic developments and social trends that characterize this part of the world. Additionally, students will learn how to critically analyze different, and at times, conflicting points of view.

HST 374. War in the Modern World.  
(3-0-3)  
This course explores theories of modern warfare through the use of historical works and case studies. Based on events in world history from World War II to the present, students will read and understand themes such as ideology, military planning and the human experience.

HST 375. Twentieth Century Asian Wars.  
(3-0-3)  
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.

(3-0-3)  
Required of each history major. Common research effort will be undertaken.

HST 381. Introduction to Public History.  
(3-0-3)  
This course serves as an introduction into the topic of applied history and its subfields. Students will explore how the past is presented to the public and how this interpretation changes with each generation. This course will also explore the different fields of public history such as historic preservation, site interpretation, museum studies and cultural resource management.

HST 382. Honors Seminar.  
(3-0-3)  
Analysis of historical events and circumstances, their origins and effects.

HST 390. Selected Topics in History.  
(1 to 3 hrs.)  
This course may be repeated if content differs.

HST 392. Internship.  
(1 to 3 hrs.)  
This course offers students the change to engage in internships in the related field of their choosing. This course can be taken for one - three hours, depending on the number of internship work hours. Students must work 120 hours for a three credit hour internship, 80 hours for a two credit hour internship, and 40 hours for a one credit hour internship.
(3-0-3)  
Prerequisites: admission to TEP, HST 300 and completion of 24 of the required 27 hours of 300-level coursework. Corequisite: HST 499D. Immerses students in social studies curriculum and instruction in preparation for the professional semester. Paired with HST 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.

HST 476. Directed Study.  
(3-0-3)  
Prerequisite: consent of instructor and department chair.

HST 499C. Senior Seminar in History.  
(3-0-3)  
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.

HST 499D. Teaching Social Studies.  
(3-0-3)  
Prerequisites: HST 300 and admission to TEP. Corequisites: HST 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 three 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.

HON 205. Interdisciplinary Honors Core II: The Medieval World.  
(3-0-3)  
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.

(3-0-3)  
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.

(3-0-3)  
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)  
Prerequisite: 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)  
Prerequisite: 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 to 3 hrs.)  
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.
HUM - Humanities Courses

HUM 203. Medieval Culture.
(3-0-3)
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)
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)
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.

(3-0-3)
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.

IMS - Imaging Sciences Courses

IMS 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.

(2-0-2)
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)
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 NURS 300.

IMS 301. Selected Topics.
(1 to 3 hrs.)
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)
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)
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 NURS 303 and WST 303.

IMS 304. Men's Health Issues.
(3-0-3)
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 healthcare (including screening and interventions), sexuality facts, health needs and problems related to the reproductive system, selected health care issues and psychosocial concerns. Equates with NURS 304.

IMS 321. Introduction to Multidisciplinary Health Services.
(3-0-3)
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.

(3-0-3)
Restriction: admission to the Bachelor of Imaging Sciences online degree program. 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. Equates with NURS 331.

IMS 341. Sectional Anatomy for the Medical Imaging Professional.
(3-0-3)
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.

**IMS 345. Global Health.**

*(3-0-3)*

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 IST 345 and NURS 345.

**IMS 351. Picture Archiving and Communication Systems.**

*(3-0-3)*

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)*

Restriction: admission to the Bachelor of Science in 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)*

Restriction: admission to the Bachelor of Science in 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)*

Restriction: admission to the Bachelor of Science in 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.

**IMS 431. Operations Management in Health Care.**

*(3-0-3)*

Restriction: admission to the Bachelor of Science in 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)*

Restriction: admission to the Bachelor of Science in 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)*

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.

**IMS 475. Human Sexuality: A Holistic Viewpoint.**

*(3-0-3)*

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)*

Restriction: admission to the Bachelor of Science in 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.

**IMS 491. Curriculum Development in Imaging Sciences.**

*(3-0-3)*

Restriction: admission to the Bachelor of Science in Imaging Sciences online degree program. A study of the principles of course development and strategies for planning, development and implementation of curriculum in imaging sciences.

**IMS 499C. Senior Seminar in Imaging Sciences.**

*(3-0-3)*

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 aspects 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.*

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**IET - Industrial and Engineering Technology Courses**

**IET 100. World of Technology.**

*(3-0-3)*

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)  
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)  
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)  
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)  
Precollage 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)  
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)  
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)  
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 201. Technology and Life Sciences.  
(3-0-3)  
This course is for a broad audience covering a historical overview and future prospects of the role of technology in various life sciences areas including biology, medicine, and clinical sciences. The course will present the array of technological applications in life sciences including assistive technologies, imaging technologies, biomechatronics, industrial biotechnology, telemedicine, etc. Emerging technologies in life sciences have ethical ramifications and the course will examine issues and ethics concerning the future use of these technologies. Environmental and economic aspects of life sciences technologies will also be explored. This course satisfies the NSC 1 requirement for general education.

IET 211. Advanced Wood Technics.  
(2-2-3)  
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)  
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)  
Designed to develop professional and technical work experience in a business, educational and or industrial organization.

IET 260. Hydraulics and Pneumatics.  
(2-2-3)  
Introductory course in the design and analysis of power transfer devices utilizing hydraulics and pneumatics, with emphasis on robotics applications.

(2-2-3)  
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)  
Technical competencies in the field of specialization. Offered only for technology management students.
### IET 264. Technology Management II.
*(6-0-6)*
Practical specialized technical skills in the related fields. Offered only for technology management students.

### IET 265. Technology Management III.
*(6-0-6)*
Attainment of advanced technical skills. Offered only for technology management students.

### IET 300. Technology and Society.
*(3-0-3)*
*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)*
*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)*
*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)*
*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)*
*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)*
Analytical and statistical inference techniques for process and manufacturing product control.

### IET 320. Industrial Project Management.
*(3-0-3)*
*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)*
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)*
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)*
*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.)*
Designed to develop professional and technical work experience in a business, educational and/or industrial organization.

### IET 352. Energy Systems and Sustainability.
*(3-0-3)*
*Prerequisite: Petition required.* This course focuses on current and future sustainable energy needs of society. Students will be given the opportunity to analyze, design, and perform design calculations for sustainable energy systems, including solar, wind, and geothermal systems, as well as energy efficient buildings. Students will also relate the relevance of these activities to practical solutions in green technologies. Topics to be covered include: introduction to energy sustainability, solar collectors, solar thermal applications, photovoltaic devices and systems, hydrogen fuel cell technology, wind energy, geothermal systems, green buildings, net metering and electricity network, installation, solar site analysis and mounting, testing and maintenance.

### IET 361. Automotive Mechanics.
*(2-2-3)*
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)*
To gain an in-depth knowledge of fluid systems as they are used in modern industry.

### IET 365. Instrumentation.
*(2-2-3)*
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)*
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.)
Designed to give an opportunity for an individual to upgrade 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)
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 398. Supervised Work Experience.**
(1 to 9 hrs.)
Prerequisites: 20 hours in major department and consent of department chair prior to registration. An enrichment program which will give experience in an occupational area which is not possible to provide in a classroom setting. Student will work under supervision in an approved organization for a period of time specified by his or her major department. Credit will be commensurate with the amount of time worked. The student will be supervised by faculty from the 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 399. Selected Topics.**
(1 to 4 hrs.)
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 Technics.**
(2-2-3)
Prerequisites: IET 111 and 211. A study of the problems and process 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)
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)
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, factorial design, blocking and confounding factors, fitting regression models and response surface.

**IET 422. Industrial Safety Standards and Enforcement.**
(3-0-3)
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)
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.)
Designed to develop professional and technical work in a business, educational and/or industrial organization.

**IET 460. Internal Combustion Engines II.**
(2-2-3)
Detailed study of exhaust emissions and the gas turbine engine.

**IET 463. Heating, Ventilating and Air Conditioning.**
(2-2-3)
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.)
Prerequisites: upper division standing and 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 499C. Senior Project.**
(1-4-3)
Prerequisites: senior standing and completion of 18 hours in track. The student will solve a problem using the scientific method of inquiry in conjunction with faculty members from his/her major area of study. The problem should include the statement of the problem, background of the problem, parameters of the problem, and methods and procedures for problem solution. 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)
The study and application of producing two and three dimensional drawings with CAD. Costs, software applications, advantages and disadvantages of a CAD system are also discussed.
ITCD 203. Computer Aided Design and Drafting II.  
(2-2-3)  
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)  
Prerequisite: ITCD 103 or consent of instructor. This course facilitates learning to create 3D drawings of objects, parts and assemblies through typical CAD and parametric procedures.

ITCD 301. Tool and Equipment Design.  
(2-2-3)  
Prerequisites: ITCD 103 and MATH 152 or higher. The layout and design of tooling, jigs, fixtures, gages and equipment through computer aided design techniques.

(2-2-3)  
Prerequisite: PHYS 201. Mechanics of materials is a branch of applied mechanics that deals with the behavior of solid bodies subjected to various types of loading. The aim of this course is to determine stresses, strains and displacements in structures and their components due to the loads acting on them using theoretical knowledge and then augmenting it with laboratory work by use of finite element analysis software. The course will offer a practical approach to the subject of applied mechanics through a wide range of real-world applications and examples. Case studies, homework, discussions, labs and projects are integrated in a cohesive approach to solving strength and mechanics of deformable bodies and materials related problems in line with contemporary technological advances.

ITCD 305. Residential Architectural Design.  
(2-2-3)  
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)  
Prerequisite: ITCD 215 or consent of instructor. Content will include advanced dimensioning techniques, utilization of attributes, parametric modeling, illustration, presentations, animation and programming.

(2-2-3)  
Prerequisites: ITCD 315 and MATH 152 or MATH 175. Mathematical 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.

(2-2-3)  
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)  
Prerequisites: ITCD 103 and MATH 152 or higher. Computerized drawings involving roadways, bridges, large developments, plats and deeds.

(3-0-3)  
Prerequisite: senior computer aided design or consent of instructor. 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 environments. 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)  
A survey course covering the broad practices, techniques and problems of the graphic arts industry. Study and experience include history, design and layout, composition methods, image reproduction, screen process and bindery applications.

ITCG 202. Graphic Arts II.  
(2-2-3)  
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)  
The study of the history and fundamentals of photo offset lithography 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)  
Prerequisite: ITCG 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)  
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)  
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)  
**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)  
**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)  
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)  
**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)  
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)  
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)  

**ITCM 304. Interpretation of Technical Drawings.**  
(3-0-3)  
**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)  
**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)  
**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)  
**Prerequisites:** ITCM 202 and ITCD 103. A study of modern surveying methods and equipment, field and office procedures and 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)  
**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)  
**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)  
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)  
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)
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)
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)
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)
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.

ITEC 242. Principles of Communications. (2-2-3)
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)
Prerequisite: ITEC 242. This course covers the theory of fiber optic transmission media and their application to various communication 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)
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)
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)
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)
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)
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)
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)
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)
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)
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 MAT-LAB signal processing tool box. Designed for students who have some basic familiarity with electric signal analysis.
ITEC 443. Industrial Electricity.
(2-2-3)
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)
Prerequisite: ITEC 344. The course covers fundamental concepts of satellite communications including satellite link modulation schemes, error-correction techniques, and spacecraft and ground station hardware and instrumentation.

(2-2-3)
Prerequisite: ITEC 345. Computer architecture, addressing modes, instruction sequence, memories, I/O systems, AD systems, assemblers, interpreters, operating systems and microprocessor interfacing.

ITEC 450. Digital Signal Processing II.
(2-2-3)
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 480. Digital Communication and Networking.
(2-2-3)
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.

ITMT - Industrial Technology - Manufacturing Courses

ITMT 106. Thermoplastic Processing.
(2-2-3)
Introduction to the materials and techniques employed in the processing of thermoplastics.

ITMT 107. Thermosetting Plastics and Composites.
(2-2-3)
Study of the various ways thermosetting plastic compounds are processed.

(3-0-3)
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)
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)
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.

(2-2-3)
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)
Prerequisite: 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.

(2-2-3)
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)
Prerequisite: ITMT 270 or consent of instructor. Electronic, digital 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)
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)
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 484. Manufacturing Information Systems.
(2-2-3)
Prerequisite: ITMT 488. Advanced tool and machining theory, with emphasis on production machining, and progressive tooling for computerized numerical control applications.

ITMT 486. Patternmaking and Foundry.
(2-2-3)
Prerequisite: ITMT 386. Casting of hot metals with activities in pattern development, sand testing and mold design.
ITMT 488. Flexible Manufacturing Engineering Technology.  
(2-2-3)  
Prerequisite: ITMT 386. Advanced tools and machining theory; use of carbides, with emphasis on production machining. Turret and progressive tooling design.

IECE - Early Childhood Education Courses

IECE 301. At-Risk Infants and Toddlers.  
(3-1-3)  
Prerequisites: EDSP 230, EDEC 253, IECE 311, and IECE 416 or EDEC 416. 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)  
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)  
Prerequisite: EDSP 230, EDEC 253, IECE 311 and IECE 418 or EDEC 418. 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)  
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.

(3-1-3)  
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)  
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)  
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)  
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 integral parts of this course.

IECE 418. Preschool Program Planning.  
(3-1-3)  
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 and Toddlers and Preschool for 3-5 year olds.  
(12 hrs.)  
Prerequisite: admission to TEP. 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)  
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.

IST - International Studies Courses

Equate 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)  
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)  
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)  
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. World History since 1500.  
(3-0-3)  
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 HST 271.

IST 204. World Food.  
(3-0-3)  
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)  
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.

(3-0-3)  

IST 211. Introduction to World Literature I.  
(3-0-3)  
A comparative study of dramatic, lyric and narrative ancient literatures. Equates with ENG 211.

IST 212. Introduction to World Literature II.  
(3-0-3)  
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)  
Prerequisite: PHIL 200. Origin, development, assumptions, values, beliefs, practices, great leaders and principal events of Judaism, Christianity, Islam and Zoroastrianism. Equates with REL 222.

IST 222. World Religions II.  
(3-0-3)  
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 264. Ancient-Medieval.  
(3-0-3)  
An examination of ancient Near Eastern, Egyptian, Greek, Roman and Medieval art. It includes a study of materials, techniques, subjects, styles, issues functions and meanings. Equates with ART 264.

IST 265. Renaissance-Modern.  
(3-0-3)  
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)  
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)  
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 305. Cultural Anthropology.  
(3-0-3)  
Prerequisite: 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 WST 305 and SOC 305.

IST 310. Australia.  
(3-0-3)  
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)  
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)  
A study of the sociopolitical impacts of Islam on African societies from the seventh 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)  
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)  
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 326. Cuba and the Caribbean.  
(3-0-3)  
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)  
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 330. Perspectives on Canada.  
(3-0-3)  
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)  
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 HST 327.

IST 332. First Nations of Canada.  
(3-0-3)  
A comparative study of representative North American Native cultures focusing on first nations of Canada, including Ojibwe, Huron, Cheyenne, Lilooet, Nootka, Dene and Inuit, and using ethnographic, ethnohistoric and anthropological models.

(3-0-3)  
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 335. Political Economy and Environmental Policy in Canada.  
(3-0-3)  
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.

(3-0-3)  
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 340. Spanish Culture and Civilization.  
(3-0-3)  
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)  
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.

(3-0-3)  
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.

IST 350. Communication, Culture and Diversity.  
(3-0-3)  
Prerequisite: COMS 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 COMS 350.

IST 351. England to 1688.  
(3-0-3)  
Prerequisite: HST 300. The political, social and economic institutions of England through the fall of the Puritan Commonwealth. Equates with HST 316.
IST 352. England since 1688.
(3-0-3)

IST 353. Europe’s Eastern Frontier to 1709.
(3-0-3)
Prerequisite: HST 300. The story of Russia from Kievan times to the overthrow of the Romanov dynasty. Equates with HST 318.

IST 354. The Russian Empire.
(3-0-3)
Prerequisite: HST 300. Detailed account of Soviet Russia from revolution through the end of the Cold War. Equates with HST 319.

IST 355. Modern Germany.
(3-0-3)
Prerequisite: HST 300. History of Germany from unification to the present in the context of European and world events. Equates with HST 320.

IST 358. Revolutionary Europe.
(3-0-3)
Prerequisite: HST 300. History of Europe from the Age of Absolutism to the collapse of the Napoleonic Empire. Equates with HST 372.

IST 359. Nineteenth Century Europe.
(3-0-3)
Prerequisite: HST 300. The politicians, nationalistic trends and unification movements leading to World War I. Equates with HST 314.

IST 360. Twentieth Century Europe.
(3-0-3)
Prerequisite: HST 300. Detailed survey of World War II, the Cold War and contemporary events. Equates with HST 315.

(3-0-3)
Prerequisite: HST 300. Focus on early African states, the slave trade era, the rise and fall of imperial empires, and post independence events. Equates with HST 322.

IST 371. Traditional China.
(3-0-3)
Prerequisite: HST 300. Survey of early Chinese civilization and its institutions. Equates with HST 323.

IST 372. Modern China.
(3-0-3)
Prerequisite: HST 300. Survey of Chinese history since the 19th century. Equates with HST 324.

(3-0-3)
Prerequisite: HST 300. Survey of Japanese history from the beginning of its civilization to its rise as a world power. Equates with HST 325.

IST 374. The Middle East.
(3-0-3)
Prerequisite: HST 300. Survey of the Moslem world beginning with the eighth century and culminating in the present Middle Eastern situation. Equates with HST 321.

IST 379. Latin American History.
(3-0-3)
Prerequisite: HST 300. The Indian background, the rise and fall of the Iberian empires, and major events since independence. Equates with HST 326.

IST 383. Asia.
(3-0-3)
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)
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)
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)
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)
Prerequisite: MNGT 201. 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)
A five-week summer internship with a member of the Canadian Parliament in Ottawa. Prior approval of the internship supervisor is required.

(3-0-3)
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)
Prerequisite: MKT 204. 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 custom-
ers 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)*

*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 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 ART 481.

**IST 482. Contemporary World Art.**
*(3-0-3)*

This course will provide a worldwide survey of contemporary visual arts in historical context and will explore current issues in contemporary art. Equates with ART 482.

**IST 499C. Senior Seminar.**
*(3-0-3)*

This course will integrate and synthesize students' knowledge of international political, economic, cultural and social relationships between nation-states, as well as the influence of international governmental and non-governmental organizations on those relationships, as well as on domestic and foreign policies. Students will develop a more thorough understanding of societal and cultural similarities and differences across nations through a dialogue with other students focused around their international study abroad experiences. Students will study and attempt to gain a better understanding of current issues facing the globe through an analysis and interpretation of current international events and what these events mean for the future. *This course satisfies the integrative component for general education.*

**ITL - Italian Courses**

**ITL 190. Conversational Italian.**
*(3-0-3)*

An introduction to the Italian language and culture. Emphasis on correct pronunciation, rapid speech and fluency.

**ITL 200. Conversational Italian II.**
*(3-0-3)*

Emphasis on individual acquisition of correct, idiomatic Italian for communication.

**LAT - Latin Courses**

**LAT 101. Beginning Latin I.**
*(3-0-3)*

Drill in the basic elements of Latin grammar, word study and reading of simple Latin selections.

**LAT 102. Beginning Latin II.**
*(3-0-3)*

A continuation of LAT 101.

**LAT 201. Intermediate Latin I.**
*(3-0-3)*

Selections from Catullus, Cicero, Horace, Pliny, Martial, Livy and Ovid.

**LAT 202. Intermediate Latin II.**
*(3-0-3)*

Writings of Cicero, his life and influence.

**LAT 301. Advanced Latin I.**
*(3-0-3)*

Poets of the Augustan Age, together with the history of the period.

**LAT 302. Advanced Latin II.**
*(3-0-3)*

Further study of the poetry of the Augustan Age. Selections from Vergil's Aeneid.

**LEAD - Leadership Courses**

**LEAD 101. Leadership I.**
*(1-0-1)*

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)*

*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)*

*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)*

*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)*

*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)  
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)  
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)  
Focus on an intensive and integrative study of leadership in society, leadership self-assessment and an applied service learning experience in a leadership role.

PLS - Legal Studies Courses

PLS 200. Law and Individual Rights.  
(3-0-3)  
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 and Ethics.  
(3-0-3)  
A study of law and the legal system, the responsibilities and ethics of the paralegal and the major elements of the legal studies program.

PLS 226. Law for the Layperson.  
(3-0-3)  
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 legal studies credit.

PLS 305. Legal Reasoning.  
(1 to 3 hrs.)  
This course introduces students to the elements of legal reasoning, which is the tool that lawyers and judges use to formulate logical arguments and arrive at justifiable decisions about the law. It involves a clear and precise use of language, deduction, induction, conditional logic, syllogism, analogy and other tools. The skills learned in this course should be valuable to students not only in their legal careers, but also in assessing arguments throughout their lives.

PLS 321. Legal Research & Writing I.  
(3-0-3)  
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)  
Prerequisite: PLS 210 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)  
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)  
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)  
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)  
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 Commercial Code such as secured transactions, creditor/debtor remedies, and negotiable instruments.

PLS 337. Corporate Law.  
(3-0-3)  
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)  
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 345. Debtor/Creditor Relations.  
(3-0-3)  
A practical course covering the law of debtor/creditor relations including creation of debt, collection of debt, and the remedies provided through bankruptcy law with a focus on remedies under Chapter 7 of the Bankruptcy Code.
PLS 355. Administrative Law.  
(3-0-3)  
Prerequisite: PLS 210 or PLS 321 or permission of the instructor. A course that focuses on the practice and substantive law involving state and federal administrative agencies. Concentration is on workers compensation. Emphasis is evaluating, managing, and obtaining medical records useful to paralegals working in personal injury, workers compensation, social security disability, private/public disability and insurance/pension practice.

PLS 360. Special Legal Topics.  
(1 to 3 hrs.)  
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)  
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)  
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)  
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 Legal Studies.  
(1 to 3 hrs.)  
Prerequisite: consent of department chair. Open only to Legal Studies' students. Original research project or readings in a particular subject area.

PLS 490. Paralegal Internship.  
(3-0-3)  
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)  
This course covers electronic access to legal databases for retrieving and submitting court documents and information; tailoring forms to generate legal documents using new facts; analyzing and summarizing facts relevant to legal issues; using court rules to compute deadlines and perfect service of process; rules of professional conduct that commonly affect paralegals; communication skills for oral and written correspondence and job applications. This course satisfies the integrative component for general education.

LSIM - Library Science and Instructional Media Courses

LSIM 101. Introduction to Library Research.  
(2-0-1)  
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)  
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.

MNGT - Management Courses

MNGT 101. Reel Business.  
(3-0-3)  
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 requirement for general education.

MNGT 160. Business and Society.  
(3-0-3)  
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.)  
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 201. Principles of Management.  
(3-0-3)  
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 310. Small Business Organization.  
(3-0-3)  
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.

**MNGT 311. Human Resource Management.**
(3-0-3)
*Prerequisite: MNGT 201.* 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.)
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)
*Prerequisite: BBA 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.

**MNGT 365. Financial Issues for Small Business.**
(3-0-3)
*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.)
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)
*Prerequisite: MNGT 201 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)
*Prerequisite: MNGT 201.* 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)
*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.

**MNGT 417. Management and Marketing of Public and Nonprofit Organizations.**
(3-0-3)
*Prerequisites: MKT 204 and MNGT 201.* 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)
*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.

**MNGT 425. Training and Development in Industry.**
(3-0-3)
*Prerequisites: BBA 295 and MNGT 201.* 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.

**MNGT 436. Decision-Making and Project Management.**
(3-0-3)
*Prerequisite: BBA 370 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.)
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 track credit.

**MNGT 450. Supply Chain Management.**
(3-0-3)
*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 465. Organizational Behavior.**
(3-0-3)
*Prerequisite: MNGT 201.* 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.
MNGT 476. Special Problems in Management. (1 to 3 hrs.)
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.)
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 track credit.

MKT - Marketing Courses

MKT 200. The ABCs of Marketing. (3-0-3)
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 204. Marketing. (3-0-3)
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 and Social Responsibility. (3-0-3)
Prerequisites: MKT 204 and MNGT 201 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.)
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 track credit.

MKT 340. E-Marketing and Social Networking. (3-0-3)
Prerequisite: MKT 204 or consent of instructor. This course examines emerging interactive technologies 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)
Prerequisite: MKT 204. 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)
Prerequisite: MKT 204. 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)
Prerequisite: MKT 204 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)
Prerequisite: MKT 204 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)
Prerequisite: MKT 204 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)
Prerequisite: MKT 204 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.)
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.)
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)
Prerequisite: MKT 204. 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)
Prerequisites: MATH 305 and MKT 204. 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)
Prerequisite: MKT 204. Required for marketing track 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)
Prerequisite: MKT 204. 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)
Prerequisite: MKT 204. 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.

MKT 476. Special Problems in Marketing.
(1 to 3 hrs.)
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)
Prerequisites: MKT 204, MNGT 201 and completion of or concurrent enrollment in all required marketing option courses, or consent of instructor. An integrated course in marketing, systematically 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.)
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.

MATH - Mathematics Courses

MATH 090. Pre-Algebra.
(3-0-3)
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)
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)
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)
A basic course emphasizing problem solving using graphing calculators.
MATH 123. Introduction to Statistics.  
(3-0-3)  
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 125. Introduction to Biostatistics.  
(3-0-3)  
Prerequisites: C or better in MATH 090 or MATH 091 or minimum ACT Math subscore of 19. An introduction to biostatistics to help students become more statistically literate. This course focuses on the foundational aspects of scientific analysis of healthcare data to answer health and wellness questions and solve problems. Students who master these concepts will be in a better position to read and understand research in order to make more informed decisions about health and wellness issues for self and others. The statistical concepts are presented within the context of the applications and calculations are performed by the instructor only to the extent needed in order to facilitate student understanding of how to use technology to obtain the needed analysis to answer questions. This course satisfies the NSC I requirement for general education.

MATH 131. Mathematical Reasoning and Problem Solving.  
(3-0-3)  
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.

(3-0-3)  
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)  
Prerequisite: "C" or better in MATH 093 or minimum ACT math subscore of 20. Trigonometric functions, trigonometric identities, inverse functions and applications.

MATH 152. College Algebra.  
(3-0-3)  
Prerequisite: "C" or better in MATH 093 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)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
**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)  
**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)  
**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)  
**Prerequisite:** MATH 175 or consent of instructor. Vector spaces; determinants; matrices; linear transformations; eigenvectors.

MATH 303. Data Structures.  
(3-0-3)  
**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 305. Business Statistics.  
(3-0-3)  
**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 305.*

MATH 308. Discrete Mathematics.  
(3-0-3)  
**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.

(3-0-3)  
**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)  
**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)  
**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)  
**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)  
**Prerequisite:** MATH 300. Groups, rings, integral domains and related topics.

MATH 353. Statistics.  
(3-0-3)  
**Prerequisites:** MATH 123 or MATH 131, or MATH 135, or MATH 141, or MATH 174, or MATH 175. 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 305.*

(3-0-3)  
**Prerequisites:** MATH 170 and 175. Linear, integer and dynamic programming, game theory and scheduling.

MATH 363. Differential Equations.  
(3-0-3)  
**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)  
**Prerequisite:** MATH 275. A calculus-based introduction to probability and statistics.

MATH 370. College Geometry I.  
(3-0-3)  
**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)  
**Prerequisite:** MATH 370. Geometric transformations, non-Euclidean geometry, projective geometry, geometric topology, geometry of inversion.
MATH 389. Honors Seminar. (3-0-3)
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 computation 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)
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)
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.

MATH 402. Integrated Biology, Mathematics and Physical Science Teaching Methods. (2-2-3)
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 and their subsequent roles as classroom teachers. Equates with BIOL 402.

MATH 403. Integrated Biology, Mathematics and Science Field Experiences in Teaching. (1-4-3)
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)
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)
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)
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)
Prerequisite: MATH 410. Topological properties of Euclidean space; theory of differentiation and integration; sequences and series of functions.

MATH 418. Probability. (3-0-3)
Prerequisites: MATH 275 and 365. A course in mathematical probability and its applications to statistical analysis.

MATH 420. Mathematical Statistics. (3-0-3)
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)
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)
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.

MATH 453. Concepts in the Design of Experiments. (3-0-3)
Prerequisite: MATH 353, MATH 305 or MATH 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)
Prerequisites: MATH 353, MATH 305 or MATH 365 or equivalent. Linear and quadratic regression models; least squares estimates; statistical inference; multicollinearity; residual analysis; selection of regression models; lack of fit.
MATH 456. Nonparametric Statistics. (3-0-3)
Prerequisite: MATH 353, MATH 305 or MATH 365. A course in basic nonparametric methods with applications.

MATH 463. Partial Differential Equations. (3-0-3)
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)
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)
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)
Corequisite: 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)
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.)
Prerequisite: consent of instructor. New curricula developments in mathematics.

MATH 499C. Senior Thesis I. (1-2-2)
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 MATH 499D, satisfies the capstone component for general education. This course equates with CS 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.

MATH 499D. Senior Thesis II. (0-2-1)
Prerequisite: CS/MATH/PHYS 499C. Completion of the directed research project 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. Equates with CS/PHYS 499D. This course satisfies the integrative component for general education.

MS - Military Science Courses

MS 101. Introduction to Military Science. (2-0-2)
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)
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)
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)
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)
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)
Corequisite: MS 201. Only open (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)*
Introduction to individual and team aspects of 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)*
*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)*
*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)*
*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)*
*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)*
*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)*
Attendance at ROTC Advanced Summer Camp. (Six weeks in duration.)

**MS 401. Leadership Challenges and Goal Setting.**
*(2-0-2)*
*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)*
*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)*
*Corequisite: MS 402A.* 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)*
*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
MUSG - Music (Class Applied) Courses

MUSG 123. Class Piano I. 
(0-2-1)

MUSG 124. Class Piano II. 
(0-2-1)  
Prerequisite: MUSG 123.

MUSG 125. Score Reading. 
(0-2-1)  
This course improves students' ability to sight-read scores efficiently at the piano. Scores will include solo piano and vocal music with piano accompaniment from the Baroque to modern periods, as well as four-part hymns and open scores up to four staves. This course will prepare students for future ensemble playing, conducting and arranging. This course may be repeated for credit.

MUSG 126. Traditional English and American Dance. 
(0-2-1)  
Technique and style of American and English country dances on the circle, square and contra formation.

MUSG 135. Class Guitar I. 
(0-2-1)

MUSG 136. Class Classical Guitar. 
(0-2-1)

MUSG 183. Studio Improvisation. 
(0-2-1)  
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)  
Not for woodwinds majors.

MUSG 212. Class Woodwinds II. 
(0-3-1)  
Prerequisite: MUSG 211.

MUSG 213. Class Brasswinds I. 
(0-3-1)  
Not for brasswinds majors.

MUSG 214. Class Brasswinds II. 
(0-3-1)  
Prerequisite: MUSG 213. Performance techniques and teaching procedures for brasswind instruments. May be substituted for MUSG 213.

MUSG 215. Class Harp. 
(0-2-1)

MUSG 217. Class Percussion. 
(0-2-1)

MUSG 223. Class Piano III. 
(0-2-1)  
Prerequisite: MUSG 124.

MUSG 224. Class Piano IV. 
(0-2-1)  
Prerequisite: MUSG 223.

MUSG 226. Class Strings. 
(0-2-1)

MUSG 235. Class Guitar II. 
(0-2-1)

MUSG 239. Class Voice. 
(0-2-1)

MUSG 240. Diction for Singers I. 
(0-2-1)  
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)  
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)  
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)  
Prerequisite: MUSG 245. Continuation of MUSG 245.

MUSG 345. Jazz Keyboard III. 
(0-2-1)  
Prerequisite: MUSG 246. Jazz keyboard techniques with emphasis on solo playing.

MUSG 346. Jazz Keyboard IV. 
(0-2-1)  
Prerequisite: MUSG 345. Continuation of MUSG 345.

MUSG 379. Double Reed Making. 
(0-2-1)  
Concepts and skills of making double reeds, oboe through contrabassoon. May be repeated for credit.
MUSG 383. Studio Improvisation.
(0-2-1)
Prerequisite: four-hours of credit in MUSG 183. May be repeated for credit.

MUSG 483. Studio Improvisation.
(0-2-1)
Prerequisite: four hours of credit in MUSG 383. May be repeated for credit.

MUSC - Music (Conducting) Courses

MUSC 271. Basic Conducting.
(2-0-2)
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)
Prerequisite: MUSC 271. Baton technique, rehearsal procedures, choral diction and style and interpretation of choral works.

MUSC 472. Instrumental Conducting.
(2-0-2)
Prerequisite: MUSC 271. Baton technique, rehearsal procedures and style and interpretation of instrumental works.

MUSC 473. Rehearsal Techniques for Jazz Ensembles.
(2-0-2)
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)
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).

(3-0-3)
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)
Rudiments of music theory and methods for teaching music to elementary school children.

MUSE 325. Materials and Methods for Elementary Grades.
(2-2-3)
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 to 3 hrs.)
Two full days weekly of teaching under supervision in public schools in nearby communities.

MUSE 336. Field Experience.
(1 to 3 hrs.)
Continuation of MUSE 335.

MUSE 375. Vocal Methods and Materials.
(3-0-3)
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)
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)
Demonstration and practice in simple repairs and maintenance of band and orchestral instruments.

(2-1-2)
Survey and evaluation of materials and methods for teaching class and private piano.

(2-0-2)
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 415. Voice Pedagogy.
(3-0-3)
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.

MUSE 458. Percussion Pedagogy.
(2-0-2)
A study of the development of percussion instruments, literature and performing techniques.

MUSE 479. Marching Band Techniques.
(2-0-2)
Techniques of preparing marching bands for performance.
**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 183. Introduction Traditional Music Ensemble.**  
(0-2-1)  
Corequisite: MUSP 138a-v, MUSP 238a-v, MUSP 338a-v, or MUSP 438a-v. Private traditional instruction.

**MUSM 200, 400. Student Recital.**  
(0-1-0)  
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)

**MUSM 336. Woodwind Ensemble.**  
(0-2-1)

**MUSM 337. Jazz Combo.**  
(0-2-1)  
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)  
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)

**MUSM 362. Trombone Choir.**  
(0-2-1)

**MUSM 363. Tuba and Euphonium Ensemble.**  
(0-2-1)

**MUSM 367. Brass Choir.**  
(0-2-1)  
Open to brass players.

**MUSM 368. Brasswind Ensemble.**  
(0-2-1)

**MUSM 369. Percussion Ensemble.**  
(0-2-1)

**MUSM 370. Concert Band.**  
(0-2-1)  
Open to all students.

**MUSM 371. Symphony Band.**  
(0-2-1)  
Open to all students.

**MUSM 372. Marching Band.**  
(0-5-1)  
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)

**MUSM 379. Orchestra.**  
(0-2-1)  
Open to all string students and to selected wind and percussion players on demand.

**MUSM 380. Jazz Ensemble I.**  
(0-2-1)  
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)  
Open to all students.

**MUSM 382. Jazz Vocal Ensemble.**  
(0-2-1)  
Open to all students.

**MUSM 383. Traditional Music Ensemble.**  
(0-2-1)

**MUSM 384. Guitar Ensemble.**  
(0-2-1)

**MUSM 387. Accompanying.**  
(0-2-1)  
Two-hours of studio accompanying per week.

**MUSM 389. Keyboard Ensemble.**  
(0-2-1)  
Preparation and performance of piano ensemble literature.

**MUSM 390. Vocal Ensemble.**  
(0-2-1)

**MUSM 391. University Chorus.**  
(0-3-1)  
Open to all University students interested in singing.

**MUSM 392. Concert Choir.**  
(0-2-1)  
Open to all students.

**MUSM 393. Chamber Singers.**  
(0-3-1)  
Selected group of 16 singers.
MUSH 171. Global Perspectives in Music.
(3-0-3)
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)
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)
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)
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)
Brief history; techniques of hymn and anthem playing and/or directing; planning the worship service.

MUSH 338. Traditional Music History I.
(3-0-3)
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)
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)
Prerequisite: MUSH 339. 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 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)
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)
Prerequisite: MUSH 361. The history of music in Western Europe, Russia and America from the 18th century to the present.

(3-0-3)
A survey of African-American music in the U.S. from 1600 to present.

MUSH 365. Jazz History and Literature.
(3-0-3)
A survey of jazz history from its beginning (ca. 1850) to the present.

(3-0-3)
A survey of the history of American music from colonial times to the present.

MUSH 481. Keyboard Literature.
(3-0-3)
Survey of keyboard music from the 16th century to present.

MUSH 490. School Band Literature.
(2-0-2)
Examination and criticism of music for training and concert use by groups at various levels of attainment.

MUSH 491. Choral Literature.
(2-0-2)
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)
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.

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 127, 227, 327, 427 Private Violin.
MUSP 128, 228, 328, 428 Private Viola.
MUSP 129, 229, 329, 429 Private Cello.
MUSP 134, 234, 334, 434. Private Jazz.
MUSP 135, 235, 335, 435 Private Classical Guitar.
MUSP 136, 236, 336, 436 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 138k, 238k, 338k, 438k Private Celtic Fiddle.
MUSP 138l, 338l Private Special Traditional Instruction.
This course is offered for students who wish to study, as an elective, instruments not usually offered at the Kentucky Center for Traditional Music (e.g. steel guitar, bagpipes, or other) when there is student demand and we have qualified instructors.
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 360. Junior Recital.
(0-3-3)
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.

MUSP 470. Composition Recital.
(1-0-2)
Prerequisite: approval of the music faculty. Preparation and performance in recital of student’s compositions.

MUSP 480. Private Applied Pedagogy.
(1-0-1)
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.

MUSP 499C. Senior Recital.
(3-0-3)
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.

(2-0-2)
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)
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.)
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)
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.

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)
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 131. Music Theory I.
(2-2-3)
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 132. Music Theory II.
(2-2-3)
Corequisite: MUST 131. An introduction to the basic elements of music theory followed by the study of diatonic triads and seventh chords in inversion, non-chord tones, cadences, and part-writing in SATB style. Standard formal structures will be studied. Melodic and rhythmic concepts will also be emphasized, and representative aural skills, analysis projects and keyboard exercises will be included.

MUST 133. Music Reading I.
(0-2-1)
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)*  
*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)*  
*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)*  
*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)*  
*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 present day via visual and aural score shows.

**MUST 240. Jazz Theory.**  
*(2-0-2)*  
*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)*  
*Prerequisite: MUST 237 or consent of instructor.* Study and practice of basic formal compositional principles.

**MUST 264. Elementary Composition II.**  
*(1-1-2)*  
*Prerequisite: MUST 263.* Continuation of MUST 263.

**MUST 331. Counterpoint.**  
*(2-0-2)*  
*Prerequisites: MUST 237.* Writing of 16th and 18th century strict and free counterpoint, cannon, inversion, fugue. Some 20th century techniques.

**MUST 345. Aural Skills.**  
*(2-0-2)*  
*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)*  
*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)*  
*Prerequisite: MUST 363.* A continuation of MUST 363.

**MUST 430. Arranging.**  
*(2-0-2)*  
*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)*  
*Prerequisite: MUST 430. Continuation of MUST 430.*

**MUST 433. Arranging for Jazz Ensembles I.**  
*(2-0-2)*  
Techniques of arranging for large and small jazz ensembles.

**MUST 434. Arranging for Jazz Ensembles II.**  
*(2-0-2)*  
*Prerequisite: MUST 433. Continuation of MUST 433.*

**MUST 445. Chart Writing and Application.**  
*(3-0-3)*  
*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)*  
*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)
Prerequisite: MUST 462. Continuation of MUST 461.

MUST 465. Form and Analysis.
(2-0-2)
Prerequisites: MUST 233 and 237. A study of the elements of musical design through aural and score analysis.

NURA - Nursing (Associate) Courses

NURA 103. Nursing I.
(4-6-6)
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)
Prerequisite: "C" or better in NURA 103. Corequisite: BIOL 217.
This course is a continuation of NURA 103 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)
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 core, FYS 101, PSY 154 with a minimum grade of "C." Corequisite: BIOL 217. 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 and NURA 107. 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)
Prerequisite: "C" or better in NURA 107 or NURA 111. Corequisites: COMS 108 and Humanities 1 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 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)
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)
Prerequisites: "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 healthcare organizations (KAR 20.320).

NURB - Nursing (Bachelor's) Courses

NURB 260. Wellness and Health Promotion.
(2-0-2)
Restriction: admission to the BNP Program, prelicensure 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)
Restriction: admission to the BNP Program, prelicensure 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)
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)
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 life span.

**NURB 320. Care of Older Adults.**
(3-6-5)  
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)  
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 healthcare.

**NURB 324. Acute Alterations in Adult Health I.**
(4-9-7)  
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)  
Restriction: RN license or junior standing in the baccalaureate prelicensure 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)  
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)  
Prerequisites: successful completion of the first five semesters of the BNP curriculum or admission to the RN (Postlicensure) 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)  
Prerequisite: NURB 324. This course is a continuation of NURB 324. 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)  
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. Emphasis is placed on current and emerging issues in healthcare delivery.

**NURB 424. Public Health.**
(3-0-3)  
Prerequisite: NURB 326. This course is designed to study and apply the public health core functions and the essential services of public health to wellness promotion and disease prevention frameworks of diverse populations. Emphasis is placed on application and assessment of the core functions.

**NURB 461. Nursing Leadership and Management.**
(3-0-3)  
Prerequisite: successful completion of the first seven semesters of the BNP curriculum. The role and function of the professional nurse as a manager of nursing care is studied in relation to leadership and management theories, strategies and principles of management. Three hours of theory per week.

**NURB 472. Independent Study in Nursing.**
(1 to 6 hrs.)  
Prerequisites: admission to BNP and junior or senior standing. Opportunity for in-depth study in an area of special interest in nursing.

**NURB 498. Nursing Senior Seminar.**
(3-0-3)  
Prerequisite: successful completion of the first seven semesters of the BNP curriculum. Corequisite: NURB 499C. An in-depth examination of the students’ ability to perform critical thinking, decision-making, problem-solving, and clinical reasoning. The course provides students with the opportunity to enhance their reasoning abilities along with the concept of reflection upon professional practice in areas including, but not limited to, current issues and trends relevant to nursing and healthcare.

**NURB 499C. Advanced Nursing Practicum.**
(3-12-3)  
Prerequisite: NURB 424. Corequisite: NURB 498. This course is the senior capstone course of the BNP. This course provides an opportunity to demonstrate the application of critical thinking skills through the nursing process, in the planning and provision of nursing care for patients at any stage of the life span experiencing health alterations. This will be done in a supervised setting and will meet the Kentucky Board of Nursing (KBN) integrated practicum requirement. This course focuses on facilitating an interdisciplinary approach to provide and manage nursing care for individuals and families of diverse cultures throughout the life span,
who have alterations in health. This course satisfies the integrative component for general education.

**NUR - Nursing (NUR) Courses**

**NUR 385. Camp Nursing.**
(2-0-2)
Prerequisites: NURA 107 and NURB 264. Restricted to students enrolled in the ADNP or BNP nursing programs. Service Learning: Camp Nursing is a course designed to increase the students’ understanding and appreciation of camp nursing and the camp experience for children who have experienced the loss of a loved one within the last year. Emphasis will be placed on bereavement, the grief process, growth and development and psychosocial adaptation of the school-age and adolescent child. The course has a seminar component during the spring semester with a field experience (camp) required during the Summer II term.

**NURS - Nursing (NURS) Courses**

**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)
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.

**NURS 202. Medical Terminology.**
(2-0-2)
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)
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.)
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)
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)
Prerequisites: COMS 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)
Prerequisites: COMM 108/COMS 108, ENG 100 and 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 321. Introduction to Multidisciplinary Health Services.**
(3-0-3)
A study of various health careers focusing on the roles and responsibilities, levels of education and credentialing, daily functions and career advancement options. Equates with IMS 321.

**NURS 331. Issues and Trends in Health Care Delivery Systems.**
(3-0-3)
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.

**NURS 345. Global Health.**
(3-0-3)
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)
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)
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)
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.

NURS 475. Human Sexuality: A Holistic Viewpoint. (3-0-3)
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
NUTR 101. Nutrition and Well-Being. (3-0-3)
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.

NUTR 201. Principles of Nutrition. (3-0-3)
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.

PHIL - Philosophy Courses
PHIL 100. Beginning Philosophy. (3-0-3)
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)
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)
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)
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)
An examination of moral principles and their application to selected issues, which may include bio-medical ethics, abortion, euthanasia, capital punishment, affirmative action, poverty and hunger, sexual morality, marriage, lying, cheating, lifestyle and personality and business practices.

PHIL 307. Philosophy of Religion. (3-0-3)
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)
Major theories of art, aesthetic experience, the structure of art, problems in aesthetics and art criticism.

PHIL 312. Symbolic Logic. (3-0-3)
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)
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)
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)
An investigation of various aspects of the philosophical problem of the meaning of life.

PHIL 333. Environmental Ethics. (3-0-3)
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)
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)
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)
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)
A history of Western philosophy from Renaissance to the present.

PHIL 361. Social and Political Philosophy. (3-0-3)
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)
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.)
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)
Prerequisites: at least one course in Philosophy or permission of the instructor. 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)
Prerequisite: at least one course in philosophy or permission of instructor. Study and analysis of selected issues and readings in moral philosophy. May include normative ethics, metaethics, moral epistemology and/or value theory.

PHIL 410. Current Philosophy. (3-0-3)
Prerequisites: at least one course in Philosophy or permission of instructor. An examination, interpretation and evaluation of the ideas of leading representatives of 20th century philosophies.

PHIL 412. Symbolic Logic. (3-0-3)
Prerequisite: PHIL 106 or permission of the instructor. 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 420. Metaphysics. (3-0-3)
Prerequisite: at least one course in philosophy or permission of instructor. 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)
Prerequisite: at least one course in philosophy or permission of instructor. 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.)
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)
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.

PHED - Physical Education Courses

PHED 100. Golf. (0-2-1)
Emphasis on skill, knowledge and techniques for individual participation.

PHED 101. Tennis. (0-2-1)
Emphasis on skill, knowledge, tactics and techniques for individual participation.
PHED 102. Badminton.
(0-2-1)
Emphasis on skill, knowledge, tactics and techniques for individual participation.

PHED 103. Archery.
(0-2-1)
Emphasis on skill, knowledge, tactics and techniques for individual participation.

PHED 104. Gymnastics.
(0-2-1)
Emphasis on self-testing activities.

PHED 105. Conditioning.
(0-2-1)
Emphasis on developing fitness through a variety of exercises and activities.

(0-2-1)
Basic movement skills involved in bowling.

PHED 108. Restricted Physical Education.
(0-2-1)
Students with either a structural or functional problem. May be repeated one time for credit.

(0-2-1)
Equates with AGR 109.

(0-2-1)
Activity course in basic martial arts techniques and etiquette, plus self-defense concepts and strategies.

PHED 113. Soccer.
(0-2-1)
Techniques and participation in soccer.

PHED 117. Stunts and Tumbling.
(0-2-1)
Skills that promote strength, individual control and development, and group perfection.

PHED 118. Volleyball.
(0-2-1)
Rules, techniques and participation in volleyball.

PHED 120. Basic Rhythms.
(0-2-1)
Skills and knowledge in fundamentals of dance.

PHED 121. Modern Dance.
(0-2-1)
Movement as a means of self-expression.

PHED 122. Social Dance.
(0-2-1)
Steps and combinations of popular dances.

PHED 123. Folk and Square Dancing.
(0-2-1)
Movements of American square dance.

PHED 125. Basketball Skills.
(0-2-1)
Skills of basketball.

PHED 126. Team Sports.
(0-2-1)
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)
Emphasis on skill, knowledge and strategy.

PHED 130. Beginning Swimming.
(0-2-1)
Learning to swim well enough to care for one's self under ordinary conditions.

(0-2-1)
Perfection of standard strokes, diving.

PHED 132. Lifesaving.
(0-2-1)
Rescue methods in all types of water.

PHED 133. Instruction to Water Safety.
(0-2-1)
Prerequisite: current Senior Lifesaving Certificate. Teaching methods and techniques in lifesaving.

PHED 140. Aerobics.
(0-2-1)
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)
Emphasis on knowledge, techniques, methods and training program development for those interested in strength development.

PHED 142. Softball.
(0-2-1)
Emphasis on skill and performance enhancement, as well as increasing basic knowledge and strategic background.

PHED 143. Backpacking and Orienteering.
(0-2-1)
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)
Interpretation of rules for major sports. Methods and techniques
PHED 205. Lifetime Fitness (A Scientific Approach).
(2-2-3)
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)
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)
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)
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)
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, they are prepared to include these in a school's physical education curriculum.

PHED 215. Methods of Teaching Team Sports.
(0-2-1)
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)
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, they are prepared to include these in a school's physical education curriculum.

PHED 217. Methods of Teaching Gymnastics and the Martial Arts.
(0-2-1)
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, they are prepared to include these in a school's physical education curriculum.

PHED 218. Methods of Teaching Dance.
(0-2-1)
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, they are prepared to include these in a school's physical education curriculum.

PHED 220. Athletic Training I.
(3-0-3)
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)
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)
Methods, techniques and procedures used in evaluation of students in physical education and recreation.

(3-0-3)
Study of structural and mechanical factors in human motion.

PHED 311. Movement Exploration.
(2-2-3)
Child-centered program with the demonstration of methods whereby a child may learn to move experimentally, expressively and efficiently.

(3-0-3)
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)
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)
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)
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)
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)
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)
Prerequisites: PHED 220 and 340. Evaluation of athletic injuries.

PHED 350. Coaching of Sport.
(1-2-2)
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 340. Athletic Training II.
(3-0-3)
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 420. Administration of School Athletic Programs.
(3-0-3)
Administrative principles and procedures applicable to school athletic programs.

PHED 423. Exercise Management: Special Populations.
(3-0-3)
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)
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)
Understandings regarding the psychological and sociological factors influencing performance in physical activities.

PHED 432. Physiology of Exercise.
(3-0-3)
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)
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)
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)
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)
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)
Prerequisite: completion of PHED 432 and prerequisite or corequisite PHED 441. Application of knowledge in kinesiotherapy in clinical settings, including experience in neurology, orthopedics, pediatrics, psychiatric and geriatric departments.

PHED 475. Adapted Physical Education.
(2-2-3)
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 476. Special Problems in Physical Education.
(1 to 3 hrs.)
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 477. Coaching Internship.
(0-6-3)
Prerequisite: completion of 75 percent of required courses in the coaching minor or consent of department chair. Planning, leadership, supervision and program evaluation in coaching under qualified administrative leadership and University faculty supervision. Laboratory experiences at the interscholastic and/or intercollegiate level are an integral part of the course. Application must be made through the department chair.

PHED 480. Workshop.
(1 to 3 hrs.)
Prerequisite: senior standing. The workshop format is an interactive learning experience designed to build and/or improve specific skills with a physical education orientation. A maximum of six semester hours (with different workshop topics) may be earned under this course number.
PHED 490. Internship in Athletic Training.  
(0-18-6)  
Prerequisites: BIOL 234, PHED 220, 221, 340 and 341; admission to the Athletic Training Internship Program. Corequisites: PHED 306 and 432. An advanced class with hands-on experience, which is required for certification.

PHED 499D. Senior Capstone in Exercise Science.  
(3-0-3)  
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 integrated component for general education.

PHYS - Physics Courses

PHYS 109. History of the Universe.  
(3-0-3)  
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.

(3-0-3)  
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 123. Concepts and Experiences in Energy.  
(3-0-3)  
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, SCI 123, and SSE 123. This interdisciplinary course satisfied the NSC II requirement for general education.

PHYS 199. Selected Topics.  
(1 to 6 hrs.)

PHYS 201. Elementary Physics I.  
(3-0-3)  
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)  
Corequisite: PHYS 201. Laboratory for PHYS 201.

PHYS 202. Elementary Physics II.  
(3-0-3)  
Prerequisite: PHYS 201 or IETC 141. Electricity and magnetism, light and optics, atomic and nuclear physics.

PHYS 202A. Elementary Physics II Laboratory.  
(0-2-1)  

PHYS 211. Circuits.  
(3-2-4)  
Prerequisite: MATH 275. Corequisite: PHYS 232. Linear circuits consisting of passive and active circuit elements; sinusoidal forcing functions and phasors; steady-state response.

(3-0-3)  
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 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)  
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)  

PHYS 231A. Engineering Physics I Laboratory.  
(0-2-1)  
Corequisite: PHYS 231. Laboratory for PHYS 231.

PHYS 232. Engineering Physics II.  
(4-0-4)  
Prerequisite: PHYS 231. Electromagnetism, optics, atomic and nuclear physics.

PHYS 232A. Engineering Physics II Laboratory.  
(0-2-1)  
Corequisite: PHYS 232. Laboratory for PHYS 232.

PHYS 239. Cooperative Education.  
(1 to 8 hrs.)  
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 270. Introduction to Scientific Computing.  
(3-0-3)  
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.)

PHYS 324. Radio Astronomy.  
(3-0-3)  
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)  
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.)  
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 340. Experimental Physics.  
(1-4-3)  
Prerequisite: PHYS 232. Selected experiments from classical and modern physics. Computer analysis and simulation.

(3-2-4)  
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)  
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)  
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.

(2-2-3)  

PHYS 381. Computer Solutions to Engineering and Science Problems.  
(3-0-3)  
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)  
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.)

(3-0-3)  
Prerequisite: PHYS 353. Lattice dynamics, electrons in metals, semiconductors, and dielectric and magnetic properties of solids.

PHYS 411. Thermodynamics.  
(3-0-3)  
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)  
Prerequisite: PHYS 232. Dualistic nature of light; interference, refraction, reflection, diffraction, polarization, laser action and spectra.

PHYS 431. Space Plasma Physics.  
(3-0-3)  
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.)  
Prerequisite: consent of department chair. Participation in supervised work experience in a professional environment.

PHYS 452. Nuclear Physics.  
(3-0-3)  
Prerequisite: PHYS 232. Binding energies, nuclear forces, transmutation of nuclei, natural and artificial radioactivity.

PHYS 476. Special Problems.  
(1 to 6 hrs.)  
Prerequisite: consent of instructor. Topic to be approved prior to registration.
PHYS 481. Mathematics for Engineers and Scientists.  
(3-0-3)  
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)  
Prerequisite: PHYS 353 or consent of instructor. The wave function; Hermitian operators and angular momentum; Schrodinger’s equation, barriers, wells, harmonic oscillators and the hydrogen atom.

PHYS 499. Selected Topics.  
(1 to 6 hrs.)

PHYS 499C. Senior Thesis I.  
(1-2-2)  
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 is equated with CS 499C and MATH 499C. Prior to registration, students must file a Thesis Proposal Form in the MCSP department office. This course satisfies the integrative component for general education.

PHYS 499D. Senior Thesis II.  
(0-2-1)  
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.

PSY 154. Introduction to Psychology.  
(3-0-3)  
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)  
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)  
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.)  
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)  
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.)  
Restriction: consent required. Professional problem in psychology. Student to discuss with faculty mentor before consent can be granted. Conferences with instructor by arrangement.

PSY 281. Experimental Design and Analysis I.  
(2-2-3)  
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)  
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 300. Human Factors in Design.
(2-2-3)
Prerequisite: PSY 154 or consent of instructor. PSY 300 is concerned with the interaction between people and the manufactured items they use. This course will highlight the limitations and capabilities of people and provide information on how these limitations and capabilities should be taken into account when designing manufactured items for people.

PSY 321. Aging Brain.
(3-0-3)
Prerequisite: PSY 154 or consent of instructor. Covers basic structural and functional changes due to aging. Major topics will include aging-related changes in architecture of the brain, brain neurochemistry, higher brain functions and disorders.

PSY 339. Cooperative Education.
(1 to 8 hrs.)
Restriction: consent required. Participation in supervised work experience in a professional environment.

PSY 353. Industrial Psychology.
(3-0-3)
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)
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)
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)
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)
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 behavioral problems in classroom and clinical settings. Laboratory experiences are an integral part of course.

PSY 360. Sports Psychology.
(3-0-3)
Prerequisite: PSY 154. This course examines principles and applications of Sports Psychology, including how psychological factors affect sport and exercise performance.

(3-0-3)
Prerequisite: PSY 154. This course examines contemporary knowledge and attitudes regarding human sexuality. Emphasis is placed on the critical analysis and synthesis of psychological research on sexuality in the context of current social and cultural influences throughout the lifespan. Students are encouraged to develop an appreciation for the complexity of sexuality in its conceptualization, representation and enactment.

(3-0-3)
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 and Perception.
(2-2-3)
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)
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)
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.)
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)
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)  
*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)  
*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)  
*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)  
*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)  
*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)  
*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.

(1 to 3 hrs.)  
*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)  
*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.)  
*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)  
*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)  
*Prerequisites: PSY 156.* 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)  
*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)  
*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 of Psychology.  
(3-0-3)  
*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.*

PPOL - Public Policy Courses

PPOL 205. Conducting Public Policy Research.  
(3-0-3)  
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)
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)
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)
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)
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 nonprofit organizations.

PPOL 499C. Senior Seminar in Public Policy.
(3-0-3)
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.

RSCI - Radiologic Sciences Courses

RSCI 110. Introduction to Radiologic Sciences.
(1-0-1)
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)
Corequisites: RSCI 206 and 210. Restriction: admission to associate degree radiologic science program. The study of human needs of individuals in all states of life span. The focus is on basic patient care concepts, principles and skills, effective communication, legal and ethical issues, and related concepts such as growth and development, health and teaching/learning process. Two hours of didactic and two hours of laboratory experience per week.

RSCI 206. Radiographic Anatomy, Positioning and Imaging Production I.
(4-2-5)
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)
Corequisites: RSCI 200 and 210. Restriction: admission to associate degree radiologic science program. The 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 230. Radiography Clinical Internship I.
(0-40-10)
Prerequisites: RSCI 200, 206 and 210. Corequisite: RSCI 330. Restriction: admission to associate degree radiologic science program. Clinical experience in an affiliated healthcare 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 healthcare agency’s radiology department.

RSCI 300. Film Critique and Evaluation.
(2-0-2)
Prerequisite: RSCI 310. Corequisite: RSCI 320. Restriction: admission to associate degree radiologic science program. Radiographic film evaluation in patient positioning, anatomy and radiographic quality factors with an emphasis on methods to correct and improve images. Two hours of didactic instruction per week.
**RSCI 310. Radiographic Anatomy, Positioning and Image Production II.**  
(3-2-4)  
Prerequisites: RSCI 230 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)  
Prerequisite: RSCI 310. Corequisite: RSCI 300. Restriction: admission to associate degree radiologic science program. Clinical experience in an affiliated healthcare agency’s radiology department, designed to continue to build on clinical experience obtained in preceding RSCI courses. Emphasis is on performance of imaging procedures such as vertebral column, hip and pelvis, cranium, facial bones, and paranasal sinuses. Forty hours per week in a healthcare agency’s radiology department.

**RSCI 330. Imaging Pathology.**  
(2-0-2)  
Prerequisites: RSCI 200, 206 and 210. Corequisite: RSCI 230. Restriction: admission to associate degree radiologic science program. 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)  
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 scientist is discussed in regards to legal responsibility for radiation protection of the patient, other healthcare personnel and the public. Two hours of didactic experience per week.

**RSCI 340. Radiographic Equipment and Imaging II.**  
(2-2-3)  
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)  
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.

**REAL - Real Estate Courses**

**REAL 105. Principles of Real Estate.**  
(3-0-3)  
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, appraisals, mortgages and property management.

**REAL 200. Real and Personal Property Auctions.**  
(3-0-3)  
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)  
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)  
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)  
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)  
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)  
*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 and Investment.**  
(3-0-3)  
*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.)  
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.)  
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)  
*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.)  
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.)  
*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, interests and abilities of the student.

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**RAPP - Regional Analysis and Public Policy Courses**

**RAPP 101. Introduction to Public Policy.**  
(3-0-3)  
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)  
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 NSC II requirement for general education.*

**RAPP 203. Society, Nature and Development.**  
(3-0-3)  
This course introduces the concepts, theories and practices used to understand communities and regions, which 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)  
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)  
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)  
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)  
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)  
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)  
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.

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)  
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)  
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 IST 222.

REL 321. Early and Medieval Christian Thought.  
(3-0-3)  
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)  
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)  
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 ideas presented by major 20th century theologians such as Barth, Bultmann, Tillich, Niebuhr, Wiesman, Hartshorne, A.T. Robertson, Karl Rahner, Karl Adam, Thomas Altizer and Dietrich Bonhoeffer.

REL 476. Special Problems.  
(1 to 3 hrs.)  
Prerequisite: 12 hours in religious studies or consent of department chair. The student selects an approved topic in religion on which to do a directed study.

RCP - Respiratory Care Courses  

RCP 110. Cardiopulmonary Anatomy and 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 healthcare 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 and Special Procedures I.  
(3 hrs.)  
Prerequisite: RCP 130 and BIO 139 with a "C" or better. Prepares 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 and 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.

RUS - Russian Courses

RUS 101. Beginning Russian I.  
(3-0-3)  
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)  
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)  
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)  
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)  
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)
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)
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)
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 Teachers.** (1-4-3)
Preservice elementary and middle grades 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 for majors or minors in the physical sciences.

**SCI 123. Concepts and Experiences in Energy.** (3-0-3)
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.)

**SCI 299. Selected Topics.** (1 to 6 hrs.)

**SCI 391. Teaching Science in the Middle Grades.** (2-2-3)
Prerequisites: admission to the TEP and completion of BIOL 110, SCI 111 and ESS 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.

**SCI 402. Integrated Biology, Mathematics and Physical Science Teaching Methods.** (2-2-3)
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)
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.)
Prerequisite: consent of instructor. Topic to be approved prior to registration. Credit available in the sciences and mathematics.

**SCI 490. Science for the Elementary Teacher.** (2-2-3)
Prerequisites: BIOL 110, SCI 111, ESS 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 of field experiences are an integral part of this course.

**SCI 491. Science for the Middle School Teacher.** (2-2-3)
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.

**SWK - Social Work Courses**

**SWK 210. Orientation to Social Work.** (3-1-4)
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
SWK 230. Social Welfare History and Ethics. (3-0-3)
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)
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 CRIM 300.

SWK 301 Comparative Family Violence: An International Perspective. (3-0-3)
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.

SWK 306. Juvenile Delinquency. (3-0-3)
Prerequisites: SOC 101. 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.

SWK 310. Field Experience in Social Work. (1-2-3)
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.

SWK 315. Child Welfare Services. (3-0-3)
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)
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)
Prerequisite: SWK 320. 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)
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 and data collection and 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)
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)
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)
This course examines the social, cultural and psychological factors which influence health behaviors; provides an overview of healthcare 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)
This course provides students with knowledge and beginning helping skills that can be applied to assist individuals who are having social/emotional problems.
(3-0-3)
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)
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 with SOC 335.

(3-0-3)
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)
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)
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)
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.

(3-0-3)
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)
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.)
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.)
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)
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)
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.

(3-0-3)
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.

(3-0-3)
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)
Prerequisites: SWK 325. 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)  
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)  
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)  
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)  
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.

(3-0-3)  
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 470. Introduction to Substance Abuse Counseling.  
(3-0-3)  
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 471. Alcohol, Alcoholism and Chemical Dependency.  
(3-0-3)  
Corequisite: SWK 470. Students learn specific skills needed to identify and treat addiction. Students will learn techniques for assessment and classification of levels of substance abuse.

SWK 472. Approaches to Chemical Dependency Treatment I.  
(3-0-3)  
Prerequisites: SWK 470 and SWK 471. Corequisite: SWK 473. Students learn the basics for case management of a substance abuse client including writing case notes, developing a treatment plan, referrals and writing formal reports for court.

SWK 473. Approaches to Chemical Dependency Treatment II.  
(3-0-3)  
Prerequisites: SWK 470 and SWK 471. Corequisite: SWK 472. Students learn the basics of individual and group counseling skills and the appropriate application of each. Students are also introduced to techniques for working with special populations.

SWK 474. Practicum in Chemical Dependency.  
(3-0-3)  
Prerequisites: SWK 470, SWK 471, SWK 472 and SWK 473. Integration of theory and method to actual case situations within a 120-hour professionally supervised field experience within a selected human service organization.

(0-8-8)  
Prerequisites: SWK 424, SWK 426 and SWK 430. 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.

(1-2-3)  
Prerequisites: SWK 424, 426, 43, 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)  
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.

SOC - Sociology Courses

SOC 101. Introduction to Sociology.  
(3-0-3)  
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)  
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 satisfied the SBS I requirement for general education.

SOC 210. The Sociology of Deviance.  
(3-0-3)
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)
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)
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.

(3-0-3)
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)
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)
Prerequisite: 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.

(3-0-3)
Prerequisite: SOC 101. 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)
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)
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)
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: 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)
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)
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)
This course examines the social, cultural and psychological factors which influence health behaviors; an overview of healthcare 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: Perspectives on Women and Intimate Partner Violence.  
(3-0-3)
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)  
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 with SWK 335 or WST 335.

**SOC 350. The Human Experience of Sex and Gender.**  
(3-0-3)  
*Prerequisite: SOC 101.* 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 350.

**SOC 354. The Individual and Society.**  
(3-0-3)  
This course explores the influence of group processes on individual behavior. Topics covered include personality formation and change; small group behavior and leadership patterns.

**SOC 363. Cross-Cultural Perspectives on the Sex Industry.**  
(3-0-3)  
*Prerequisite: SOC 350 or WST 273.* This course will explore current theoretical debates and empirical studies on the global sex industry. Broad topics to be covered include the feminist sex wars, stripping, pornography, prostitution and sexual trafficking. Equates with WST/CRIM 363.

**SOC 370. Rural Sociology.**  
(3-0-3)  
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)  
*Prerequisite: SOC 101.* 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)  
Students explore modern 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)  
*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.)  
*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)  
*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)  
*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)  
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)  
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)  
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)  
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.)  
*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)  
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)  
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)  
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)  
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)  
This course is required for all sociology majors (not required for those majoring in sociology with an emphasis in criminology).

(3-0-3)  
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 incipient stages of development in American society. Equates with CRIM 461.

SOC 465. Environmental Sociology.  
(3-0-3)  
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.)  
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.

SOC 499C. Senior Seminar.  
(3-0-3)  
Prerequisites: senior standing and major in sociology. Capstone course synthesizes various themes in sociology, examines issues and debates in the field, and explores career possibilities. This course satisfies the integrative component for general education.

SSE - Space Science and Engineering Courses

SSE 120. Satellites and Space Systems I.  
(2-2-3)  
Prerequisite: MATH 174, MATH 175, or minimum ACT Math subscore of 22. 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)  
Prerequisite: SSE 120 and 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)  
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)  
Investigation of specific topics in space sciences, astronomical engineering, satellite systems and space mission operations.

SSE 324. Radio Astronomy.  
(3-0-3)  
Prerequisites: 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)  
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)
**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.

**SSE 360. Advanced Space Systems.**
(3-0-3)
**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)
**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)
**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)
**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 PHYS 431/ASTR 431.

**SSE 442. RF/Microwave Systems and Antennas.**
(2-2-3)
**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 460. Spacecraft Sensors and Remote Sensing.**
(3-0-3)
**Prerequisites:** SSE 122 and PHYS 202 or PHYS 232. Students will investigate the technologies involved in monitoring Earth systems from space platforms and in measuring spacecraft environment parameters critical to the health and safety of a spacecraft. In addition to the environment, gathering information from other sensors is the primary function of most satellite missions. Students will investigate the parameters and considerations involved in sensors for specific applications. Remote sensing techniques associated with multispectral imaging, RADAR, and LiDAR will be investigated.

**SSE 476. Directed Research**
(1 to 6 hrs.)
**Prerequisite:** petition required. Participation in a research project under faculty guidance.

**SSE 498. Senior Design Project I.**
(2-0-2)
**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)
**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.

**SPA - Spanish Courses**

**SPA 101. Spanish Language and Culture I.**
(3-0-3)
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)
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)
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)
Prerequisite: SPA 201. A continuation of SPA 201. Reading of more difficult texts.

SPA 208. Spanish Phonetics and Pronunciation.
(3-0-3)
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)
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)
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)

SPA 301. Survey of Peninsular Spanish Literature from 1700.
(3-0-3)
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)
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)

SPA 305. Conversation.
(3-0-3)
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)
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)
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.)
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)
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)
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)
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)
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.)
Prerequisite: must be admitted to the TEP. The application of current linguistic theories to the methodology of teaching French and Spanish; microteaching practice and field experiences in the
SPA 432. Contemporary Spanish and Spanish American Literature. 
(3-0-3)  
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)  
Prerequisite: SPA 300. Group instruction and practice in research methods peculiar to Hispanic literature.

SPA 476. Directed Studies.  
(1 to 3 hrs.)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
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)  
The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures and requirements for successful careers as sport administrators.

SPMT 380. Sport Media Relations.  
(3-0-3)  
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)  
The course is designed to assist students in understanding the aims, objectives, principles, policies, procedures and requirements for successful facility/event management.

SPMT 430. Sport in a Global Society.  
(3-0-3)  
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)*
This course is designed to prepare the student for the field experience component of the program.

**SPMT 471. Sport Management Internship.**
*(12-0-12)*
**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 to 3 hrs.)*
**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 and Physical Activity.**
*(3-0-3)*
**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)*
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)*
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.*

**THEA - Theatre Courses**

**THEA 100. Fundamentals of the Theatre.**
*(3-0-3)*
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)*
Essentials of distinct utterance, phonetic transcription and uses of the vocal mechanism.

**THEA 105. Modern Dance Technique.**
*(3-0-3)*
A study and application of basic modern dance technique.

**THEA 107. Introduction to Dance Performance Art.**
*(3-0-3)*
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)*
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 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)*
Practical experience and opportunities in theatre production and performance.

**THEA 200. Introduction to Dramatic Literature.**
*(3-0-3)*
Representative dramatic literature from Greek antiquity to the present.

**THEA 205. Intermediate Modern Dance.**
*(3-0-3)*
**Prerequisite:** THEA 105. A continued study and application of modern dance technique.

**THEA 207. Dance Improvisation.**
*(3-0-3)*
A study of improvisational tools used for creating and exploring dance.

**THEA 208. Beginning Ballet.**
*(1-4-3)*
A study and application of basic ballet techniques.
THEA 210. Technical Production.  
(1-4-3)  
A study of the technical elements in theatrical production; set construction, lighting and sound.

THEA 211. Costume Construction I.  
(3-0-3)  
A course in basic costume construction techniques.

THEA 225. Introduction to Theatre Production Design.  
(3-0-3)  
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)  
Practical experience and opportunities in theatre production and performance.

THEA 284. Acting Techniques.  
(3-0-3)  
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)  
An advanced study and application of modern dance technique.

THEA 307. Dance Composition.  
(3-0-3)  
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)  
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)  
A study and application of tap dance techniques.

THEA 310. Stage Movement.  
(3-0-3)  
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)  
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)  
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)  
Prerequisite: THEA 100 or consent of instructor. Development of proficiency in specific areas of the theatre. May be repeated if student has not received course credit for topic.

THEA 314. Acting for the Camera.  
(3-0-3)  
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)  
Study and application of makeup and techniques for the stage.

THEA 316. Stage Properties.  
(2-2-3)  
The study and practice of stage properties, their construction, acquiring and repair; the study of furniture history.

THEA 317. Scene Painting.  
(2-2-3)  
The study and practice of paints and painting techniques as they apply to the scenic artist.

(3-0-3)  
A historic overview and application of hip-hop and urban dance.

THEA 319. Jazz Dance.  
(3-0-3)  
A study and application of jazz dance technique.

THEA 321. Stage Lighting.  
(2-2-3)  
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)  
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)  
A study of the origins, profiles and evolution of dance in America.

THEA 325. Costume History.  
(3-0-3)  
A study of fashion and clothing trends throughout history.

THEA 326. Costume Design.  
(3-0-3)  
Prerequisite: THEA 225. A study of fashion and clothing trends throughout history.

THEA 328. Creative Sewing for the Theatre II.  
(1-4-3)  
A course in creating original patterns for stage costumes.
THEA 340. Auditioning.  
(3-0-3)  
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)  
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)  
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)  
An analysis and application of principles of creative dramatics as applied to classroom curricular activities. Field experience required for theatre majors pursuing the teaching option.

(0-4-1)  
Practical experience and opportunities in theatre production and performance.

THEA 380. Play Directing.  
(3-0-3)  
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)  
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)  
Prerequisites: THEA 100, 200, or consent of the department chair. Analysis of the structure of plays and the writing of original scripts.

THEA 413. Advanced Play Direction.  
(3-0-3)  
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)  
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)  
A detailed study of representative plays from the Greeks to mid-19th century.

THEA 453. Modern Dramatic Literature.  
(3-0-3)  
A detailed study of the drama from the growth of realism to the present day.

THEA 455. Dramatic Criticism.  
(3-0-3)  
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)  
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)  
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)  
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)  
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)  
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 hrs.)  
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)  
Practical experience and opportunities in theatre production and performance.

THEA 484. Styles of Acting.  
(3-0-3)  
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)
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 to assess your knowledge, skills and progress in your field of study in the Department of Music, Theatre and Dance. It will provide you with an opportunity to advance your skills in self-assessment, job procurement processes, procedures and materials while preparing you for the professional job market. This course satisfies the integrative component for general education.

VET - Veterinary Technology Courses

VET 108. Veterinary Clinical Anatomy.
(2-2-3)
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)
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)
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)
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 and Pharmacology.
(3-2-4)
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 pharmaceutical 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)
Prerequisites: "C" or better in VET 213, VET 218 and VET 245.
Corequisite: VET 261. This foundational course will teach technicians the methodology for studying disease pathophysiology and technical skills for diagnosis and treatment of large animal
patients. Students are given foundational health and disease lectures and case scenarios with realistic client historical information. The student is expected to research each learning issue and report to the class their findings. The students are evaluated on their level of knowledge about the disease process, their participation in clinical discussions, and the focus of their methodology for determining appropriate diagnostic testing.

**VET 258. Small Animal Medicine and Surgery I.** (2-0-2)
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 evening and weekend duties are required.

**VET 259. Veterinary Clinical Pathology I.** (2-0-2)
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)
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)
Prerequisites: "C" or better in VET 213, VET 218 and VET 245. Corequisite: VET 257. This foundational 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 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 262. Small Animal Clinics I.** (0-3-1)
Prerequisites: "C" or better in VET 213, VET 218 and VET 245. Corequisite: VET 258. 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 small animal practice. Some evenings and weekend duties are required.

**VET 264. Veterinary Clinical Pathology Clinics I.** (0-3-1)
Prerequisites: "C" or better in VET 213, VET 218 and VET 245. Corequisite: VET 259. An introductory 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 265. Veterinary Diagnostic Imaging Clinics.** (0-3-1)
Prerequisites: "C" or better in VET 213, VET 218 and VET 245. Corequisite: VET 260. The purpose of this course is to apply the principles for diagnostic imaging and imaging procedures and techniques designed to provide diagnostic information in small and large animal radiology and ultrasound in actual clinical cases.

**VET 257. Concepts of Large Animal Diseases II.** (2-0-2)
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 367. This advanced course will teach technicians the methodology for studying disease pathophysiology and technical skills for diagnosis and treatment of large animal patients. Students are given advanced health and disease lectures and case scenarios with realistic client historical information. The students are evaluated on their level of knowledge about the disease process, their participation in clinical discussions, and the focus of their methodology for determining appropriate diagnostic testing.

**VET 357. Concepts of Large Animal Diseases II.** (2-0-2)
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 368. 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 evening and weekend duties are required.

**VET 358. Small Animal Medicine and Surgery II.** (2-0-2)
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 364. 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)
Prerequisites: "C" or better in VET 357, VET 358, VET 359, VET 364, VET 365, VET 366, VET 367, VET 368 and VET 399C. 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)
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)
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 366. This course will introduce the student to the field of veterinary dentistry from a "hands on" approach. Oral anatomy, terminology, instrumentation, dental prophylaxis and oral radiography concepts covered in VET 360 will be applied. Complete dental prophylaxis procedures and oral radiographic techniques are an integral part of this course. Dental models and live animals will be used during laboratory times.

VET 366. Veterinary Dentistry. (2-0-2)
Prerequisites: "C" or better in VET 257, VET 258, VET 259, VET 260, VET 261, VET 262, VET 264, VET 265 and BIOL 213 or BIOL 217. Corequisite: VET 365. This course will introduce the student to the field of advanced veterinary dentistry. Oral anatomy, terminology, instrumentation, dental prophylaxis and oral radiography will be discussed. The clinical applications of modern veterinary dental care and the role of the veterinary dental hygienist will be emphasized.

VET 367. Large Animal Clinics II. (0-3-1)
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 368. Small Animal Clinics II. (0-3-1)
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 370. Veterinary Infectious Diseases. (3-0-3)
Prerequisites: BIOL 210 or VET 357, VET 358, VET 359, VET 364, VET 365, VET 366, VET 367 and VET 368, or permission of instructor. A study of the clinical aspects of important viral, rickettsial, chlamydial, and mycoplasmal infectious diseases of the dog and cat; with emphasis on clinically relevant aspects of etiology, epidemiology, pathogenesis, clinical findings, diagnosis, pathologic findings, therapy, prevention and public health considerations. The primary objective is to develop a clinical understanding of each disease process and the ability to explain it to a pet owner.

VET 399C. Veterinary Technician Seminar. (1-0-1)
Prerequisites: "C" or better in VET 257, VET 258, VET 259, VET 260, VET 261, VET 262, VET 264, VET 265 and BIOL 213. Corequisites: VET 357, VET 358, VET 359, VET 366, VET 367, VET 368, VET 364 and VET 365. This course is designed to provide students in the Veterinary Technology Program with a culminating experience to discuss and reflect on concepts. The students will also have the opportunity to review for the Veterinary Technician National Board Examination, which is necessary for licensure in the State of Kentucky.

VET 401. Veterinary Practice Management. (3-0-3)
Prerequisite: "C" or better in VET 357, VET 358, VET 359, VET 364, VET 365, VET 366, VET 367, VET 368 and completion of a degree from an AVMA accredited Veterinary Technology Program or permission of instructor. An in-depth study of the management skills necessary to operate a clinical or research based veterinary medical facility and personnel. Concepts in human resource management, ethics, financial responsibilities, research and regulatory compliance, client/patient care and office etiquette will be presented.

VET 402. Veterinary Clinical Assistantship. (0-3-1)
Prerequisite: "C" or better in VET 357, VET 358, VET 359, VET 364, VET 365, VET 366, VET 367, VET 368 and completion of a degree from an AVMA accredited Veterinary Technology Program. An advanced study of clinical procedures, techniques and 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)
Prerequisites: "C" or better in VET 401, VET 402, VET 499C and a passing score on the Veterinary Technician National Exam (VTNE). 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)
Prerequisites: "C" or better in VET 357, VET 358, VET 359, VET 364, VET 365, VET 366, VET 367, VET 368 and completion of a degree from an AVMA accredited Veterinary Technology Program or permission of instructor. 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. This course satisfies the integrative component for general education.

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)
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)
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)
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)
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.

(3-0-3)
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)
Prerequisite: 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)
Prerequisite: HIS 250. Experiences and perceptions of women throughout American history. Significant roles and issues are emphasized. Equates with HIS 312.

WST 320. Women Writers and Feminist Perspectives.
(3-0-3)
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)
This course explores gender issues that affect male and female students from preschool to postsecondary education. Equates with EDF 322.

(3-0-3)
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)
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 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)
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)
Prerequisite: SOC 101. 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)  
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)  
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 363. Cross-Cultural Perspectives on the Sex Industry.**  
(3-0-3)  
**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 SOC/CRIM 363.

**WST 374. American Minority Relations.**  
(3-0-3)  
**Prerequisite:** SOC 101. Examines 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 SOC 374.

**WST 375. The Middle East.**  
(3-0-3)  
**Prerequisite:** HST 300. Survey of the Moslem world beginning with the eighth century and culminating in the present Middle Eastern situation. Equates with HST 321 and IST 374.

**WST 377. 20th Century Asian Wars.**  
(3-0-3)  
**Prerequisite:** HST 300. 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 HST 375.

**WST 380. Race, Class, Gender and Crime.**  
(3-0-3)  
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 will also be exposed to criminological theories that explain criminal justice system disparity, discrimination and differences in actual offending patterns. Equates with CRIM 380 and SWK 381.

**WST 394. Gay and Lesbian Literature.**  
(3-0-3)  
**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 ENG 398.

**WST 397. Social Stratification.**  
(3-0-3)  
**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 SOC 300.

**WST 426. The Community.**  
(3-0-3)  
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. Equates with SOC 426.

**WST 452. Issues in Contemporary Media.**  
(3-0-3)  
**Prerequisite:** senior standing. Treatment of current issues within the electronic media industry. Equates with CVM 452.

**WST 474. Women’s Health Care.**  
(3-0-3)  
**Prerequisites:** CIS 101, COMS 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)  
**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)  
**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.
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